



Ministry of Health of the Republic of Moldova
State Medical and Pharmaceutical University
Nicolae Testemițanu
Medical Students and Residents Association



Abstract

May 14 - 17, 2014
Chișinău, Republic of Moldova

book



5th

International Medical Congress
for Students and Young Doctors

Med&espera





The State Medical and Pharmaceutical University "Nicolae Testemițanu" is a scientific and cultural center of continuous undergraduate and postgraduate education of doctors and pharmacists from the Republic of Moldova and abroad. It was founded based on the Institute of Medicine No.1 from Sankt Petersburg, evacuated during the IInd World War in Kislovodsk, and later on transferred to Chisinau together with students and the whole teaching staff under the name of State Institute of Medicine.

This institute started its activity on the 20th October, 1945. The foundation of the State Institute of Medicine from Chisinau served as impulse for developing the high medical education and consolidation of the health system from the country. Since 1990 the Institute carries the name of Nicolae Testemițanu (1927-1986), famous scholar, talented teacher and educator, state man, skilled organizer in the field of public health, who brought a considerable contribution to the organization and development of the health protection system in our country; was a promoter of the national revival, of the sovereignty and independence of the Republic of Moldova, Man Emeritus.

In 1995, this institution was given a new name- the State Medical and Pharmaceutical University "Nicolae Testemițanu" from the Republic of Moldova. At present, the State Medical and Pharmaceutical University "Nicolae Testemițanu" is a high educational institution of international fame that trains medical and pharmaceutical personnel in conformity with the modern concepts and international exigencies of training and education of the future specialists. The adjustment to everything that is modern in the university education, the development and consolidation of the activities of research and innovation in the field of medicine, the rhythmic development of the clinic work – are 3 components determining the image of today's University.

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Ministry of Health of the Republic of Moldova

State Medical and Pharmaceutical University
Nicolae Testemițanu

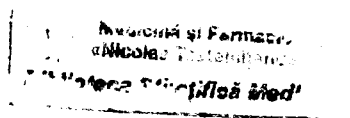
Medical Students and Residents Association

ABSTRACT BOOK

MedEspera 2014

5th International Medical Congress
For Students and Young Doctors

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WELCOME BY THE PRESIDENT OF HONOUR

The success in the activity of any teaching institution to a great extent is determined by the harmonious interdependence of customs considering the enrichment as well as the everlasting modernization of skills piled up throughout generations. Devoted to this type of encouragement element are the young generations of researchers at the State Medical and Pharmaceutical University *Nicolae Testemițanu* from Republic of Moldova, which through the initiation of International Congress for Students and Young Doctors MedEspera has managed to combine these two values by promoting the young talents in their enterprise of search and investigation.

This year we shall host and support with all the heartiness the 5th edition of the International Medical Congress for Students and Young Doctors MedEspera 2014, which is happily accepted among traditional SMPhU's concerns and we consider it an expected event particularly it will train not only the medical country community but also messengers of medical schools from many states of the world.

Today, our country as well as Alma Mater, has encountered a new wave of development, where the former applied international standards give the best results namely through competitive medical specialists on the universal market and scientific researches with impact in the domain.

I would mention that this scientific forum is not only an index, which affirms the affiliation of our institution to the international university community but also an unchallenged evidence of the evolution in the superior medical institution from Republic of Moldova.

MedEspera 2014 Congress offers the students, young doctors and pharmacists the chance to find out the dimensions of their own knowledge, and also the stimulus to fence with news from fundamental sciences, internal medicine, surgery, social medicine, stomatology and pharmacy. The Congress encourages the new generation to take part actively in the formation of medical future to demonstrate individual labor results, to express freely and argued the opinion grounded on the achieved researches. MedEspera Congress resorts to responsiveness, curiosity, civic activism and devotion from the part of young medical researchers from the country, also from those abroad, medicine must not present state, ethnic or cultural borders.

We are glad to realize the fact that this forum has become a take-off item for innovating ideas, transformed into long-lasting partnerships with other similar institutions from abroad. The international dimension of the event opens widely the horizon of the interuniversity scientific cooperations and tends to promote the originality, innovation current, contributing at the same time to the improvement of the local medical society and to the development of each participant in part.

The participation in mass of students, young doctors and researchers from the country and abroad to the Congress this year, is a proof of the growing importance of this scientific forum, its competitiveness on the international level, and also the affiliation of our University to the community of innovating universities, with evident tendencies of progress provided by disciples with a true interest for the scientific news in their professional formation.

Dear young colleagues!

I have the greatest pleasure to wish you, on behalf of SMPhU *Nicolae Testemițanu* academic community, a successful achievement of the Congress programme, beautiful and unrepeatable experiences along with new and unique person from your group of friends as well as the best impressions and memories about our country and Alma Mater, which feels the youth's pulse and knows that all the young people are the hope for a prosperous future!

Good Luck!

***Rector Ion ABABII
M.D., Ph.D., Professor,
Academician***

WELCOME BY THE ORGANIZING COMMITTEE

Dear colleagues, distinguished guests!

We have the special honour and pleasure to host the 5th edition of the International Medical Congress for Students and Young Doctors MedEspera, within the State Medical and Pharmaceutical University *Nicolae Testemițanu*.

The organization of the Congress MedEspera started from the wish and the necessity of students and young doctors to prove their research medical skills and to communicate the obtained results to their colleagues from inside and outside the country.

So, this way, the Congress MedEspera became a notorious event for the medical community in the Republic of Moldova and from abroad, succeeding to gather, each time, more and more students, young doctors and medical researchers thirsty for knowledge and eager to share their achievements to their comrades of ideas.

This year, during the Congress, we have prepared a various scientific program, and a diverse cultural program as well, which, we hope, will ensure the success of the organized event and will leave you with the best possible memories about our University- an institution of values and traditions, as well as about the city of Chisinau – considered to be the greenest city in Europe, with hospitable people and a lot of nice places to visit.

The Organizing Committee of the MedEspera 2014 Congress will do everything possible for these 3 days of Congress to remain memorable.

Dare to know and learn the latest news in medicine during the 5th International Medical Congress for Students and Young Doctors MedEspera 2014!!!

The Organizing Committee

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ABSTRACTS

FUNDAMENTAL SCIENCES SECTION

1. VARIANT ANATOMY OF THE CORONARY ARTERIES AND THEIR BRANCHES. MATHEMATICAL CALCULATIONS TYPE BLOOD SUPPLY HEART BASED MORPHOMETRIC PARAMETERS.

Marmysh S.S., Gorustovich O. A., Strelchuk S. M.

Academic adviser: E. S. Okolokulak, M.D., Professor, Grodno State Medical University, Department of Human Anatomy, Belarus.

Introduction: Despite the long history of the study of the heart as the central organ of cardio - vascular system, the problems associated with the pathology of coronary arteries (CA) and their branches do not lose their relevance to this day. For many years, the focus was research CA, in various pathologies, the results of which do not provide a complete picture of architectonic features and morphometric characteristics. Equally important is to determine the blood supply of the heart (TBSH). The classical definition of TBSH describes exclusively anatomical features architectonic vessels and does not give the amount of blood flowing through the vessels and the blood supply to the area. "White Spots" to explore issues underscore the urgency of research topics in theoretical and clinical relationships.

Purpose and objectives: To determine the particular variant anatomy and subepicardial vascular branching CA, as well as mathematically calculated based on the type of blood supply to the morphometric data.

Subjects: 58 human heart preparations of both sexes. Methods: Makrodissection, mikrodissection, morphometry, the statistical method, mathematical modeling.

Results: During the study it was found that the left coronary artery (LCA) has three options architectonics: typical - bifurcation, with the division into two branches (anterior descending branch (ADB) and the circumflex branch (CB) - 75%), trifurcation (ADB, CB and left marginal branch (LMB) - 23%), kvadrifurkatsiya (ADB, CB, LMB and branch cone (BC) - 2%).

ADB for the anterior interventricular sulcus also has 3 options architectonics: 1 - reaches apex of the heart - 55 % 2 - disappears between the middle and lower third of the anterior interventricular sulcus - 15 % 3 - goes around the top of the heart and extends into the lower third of the posterior interventricular sulcus - 30 %.

As well, we have developed an algorithm of actions and calculations, allows us to calculate TCS from a mathematical point of view, given the above mentioned morphometric parameters.

Conclusion: The method proposed for the determination of blood supply with the help of mathematical calculations, to determine the TBSH based not only on the anatomical structure as well as on the morphometric parameters of the heart.

Data on structural - functional organization and topographic - anatomical relationships VA obtained using modern research techniques, including computer programs, can be used in anatomy - in particular, in addition to the guidelines, as well as in cardiology and cardiac surgery.

Keywords: variant anatomy, coronary arteries, blood supply heart.

2. EIGHT CHANNEL AUDIOSYSTEM TO CONTROL THE COURSE OF NEUROPHYSIOLOGICAL EXPERIMENT

Oleg Sushytskyy, Ashraf Mariano Abu-Sneineh, Valentin Postemsky,

Academic adviser: I.L.Rokunets, Ph.D.; B.F.Koval, senior lecturer, National Pirogov Memorial Medical University, Vinnytsya, Ukraine

Introduction: Visualization of processes that are happening in an organism is implemented by means of rapid progress of electronics and computer systems. Especially valuable is visualization of physiological processes in central nervous system as they are short-term, unexplored and complicated in

their mechanism. We propose a new controlling system over the course of neurophysiological experiment during implantation into a brain of a rat multichannel electrode.

Materials and Methods: Eight channel original steel microelectrode with interspaces between each conductor. Through the trepanation opening the electrode was placed stereotaxically in motor cortex under narcosis. A chain of devices pre-amplifier, filters, post-amplifier, conductor and receiver were produced in neurophysiological experiment lab of National Pirogov Memorial Medical University. Registration of biopotentials is held through analog-to-digital converter on magnetic carrier at the same time potential from each channel was passed to eight channel amplifier and then to dynamics placed along the perimeter of a lab.

Discussion results: The same time with visual control over neurons' biopotentials we controlled the course of experiment using audiosystem.

Conclusion: The proposed device improves the perception of the experiment course by the researcher, helps to imagine the spatial arrangement of neurons surrounding the eight channel electrode and provides new opportunities for assessment of interaction between neurons.

Keywords: audiosystem, multichannel electrode, nervous system, rat

3. GENETIC SUSCEPTIBILITY TO ASTHMA IN CHILDREN

Bejan Denis

Academic adviser: **Amoașii Dumitru**, M.D., Ph.D., Associate Professor, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova

Introduction: Bronchial asthma is a chronic inflammatory disease based on an inappropriate stimulation of the immune system, for instance by environmental aeroallergens. It is characterized by bronchial hyperreactivity, reversible airway obstruction and mucus overproduction. During the last decades bronchial asthma has become the most common disease of childhood. Accordingly, many epidemiological and genetic studies have dealt with its origin. In fact, hundreds of genome-wide linkage analyses and association studies have identified several chromosomal regions harboring asthma susceptibility genes like chromosome 2q, 5q, 6q, 11q, 12q and 13q. Also about 100 candidate genes for asthma have been described. However, not all of them have been confirmed in independent studies. Besides the genetic predisposition environmental factors play an important role in the development of allergic diseases. Thus, recent studies focused also on the interaction of genes variants with environmental factors which is summarized under the term genetic epidemiology.

Purpose and Objectives: To evaluate peculiarities of functionally compromised alleles and genotypes spread of the CC16 gene in the general population sample of Moldovans; to assess the frequencies of alleles and genotypes of the CC16 genes in children with asthma and healthy controls; to study the association of genetic polymorphisms with asthma phenotypes; to evaluate the risk of childhood asthma development under the influence of the gene-environment interactions; to develop prognostic methods for the asthma onset and clinical evolution assessment in children.

Material and methods: The project is based on 15 children with asthma, in which we collected the history, including allergy history and collateral history, in order to build their pedigrees. We performed meta-analysis which reveals the connection between mutant allele of CC16 gene and asthma's phenotype.

Results: The study findings reveal aspects of the pathogenetic mechanisms of multifactorial disease development in ethnic Moldavians. The elaborated prognostic algorithm allows identifying high risk subjects for atopy and asthma development. The study revealed peculiarities of the spread of asthma candidate genes in children of Moldovan ethnicity and identified genetic markers and their combinations that potentially increase the risk of asthma development and are associated with clinical phenotypes of the disease.

Conclusion: Particular genetic variants of the asthma candidate gene CC16 in Moldovan children were assessed; the role of genetic factors and gene-gene interactions in the asthma development was determined; unfavorable genetic variants for the asthma development and evolution in native population were identified.

Keywords: asthma, genetics, polymorphism, mutations

4. FREQUENCY OF MRSA ISOLATION FROM BIOSUBSTRATE OF PATIENTS HOSPITALIZED IN SURGICAL WARDS OF THE REPUBLICAN CLINICAL HOSPITAL

Catan Lilia

Academic adviser: Vorobjit Valentina; PhD; Associate professor; Department of Microbiology, Virology and Immunology, State University of Medicine and Pharmacy „Nicolae Testemitanu”, Chişinău, Republic of Moldova.

Introduction: Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacterium responsible for several difficult-to-treat infections in humans. It is also called oxacillin-resistant *Staphylococcus aureus* (ORSA). MRSA is any strain of *Staphylococcus aureus* that has developed, through the process of natural selection, resistance to beta-lactam antibiotics, which include the penicillins (methicillin, dicloxacillin, nafcillin, oxacillin, etc.) and the cephalosporins. Strains unable to resist these antibiotics are classified as methicillin-sensitive *Staphylococcus aureus*, or MSSA. The evolution of such resistance does not cause the organism to be more intrinsically virulent than strains of *Staphylococcus aureus* that have no antibiotic resistance, but resistance does make MRSA infection more difficult to treat with standard types of antibiotics and thus more dangerous. MRSA is especially troublesome in hospitals, prisons and nursing homes, where patients with open wounds, invasive devices, and weakened immune systems are at greater risk of infection than the general public. This study provides information about the aggression and dominance of this bacteria, as well the incidence in surgical wards of Republican Clinical Hospital.

Materials and methods: The study was conducted on the principle of bacteriological analysis of 139 samples with *Staphylococcus aureus*, from the Register of laboratory investigations, Form no. 250 / e, approved by Ministry of Health of the Republic of Moldova, no. 828 of 31.10.2011. The data obtained were characterized and interpreted statistically: we evaluated the total number of cases of MRSA infection and its incidence comparing with the total number of cases.

The result of discussion: In a study of Republican Clinic Hospital, Bacteriological Laboratory, during 2013 were registered 139 cases of infection with *S.aureus*, 39 of them were found to be MRSA, that represents approximately 28% of all staphylococcal infections. Nearly half of the samples with MRSA belonged to patients hospitalized in the department of General Surgery - 48%, Otorhinolaryngology - 18%, Clinic -13%, and Thoracic Surgery - 11%.

Conclusion: MRSA is a „super-bacteria" extensively studied in the present, with a strong resistance to methicillin / oxacillin, frequently hospital infection acquired resistance, the most common in the departments of General Surgery and ENT. As in other countries, cases of MRSA are frequent in Moldova, unfortunately they are increasing.

Key-words: Methicillin-resistant *Staphylococcus aureus*; Nosocomial Infection „Super-bacteria”

5. ARGININE VASOPRESSIN RECEPTOR ANTAGONISTS IN THE TREATMENT OF CONGESTIVE HEART FAILURE

Carauş Mihaela

Academic Adviser: Stratu Ecaterina, M.D., Ph.D., Associate Professor, Department of Pharmacology and Clinical Pharmacology, State University of Medicine and Pharmacy “Nicolae Testemitanu”, Chişinău, Republic of Moldova.

Introduction: Arginine vasopressin (AVP) is the major physiological regulator of renal water excretion and blood volume. The AVP pathways of V1a Receptor-mediated vasoconstriction and V2 Receptor-induced water retention represent a potentially attractive target for therapy of congestive heart failure, even more that there is a big class of patients which develop resistance at diuretics.

Purpose and Objectives: Highlighting the importance of Arginine vasopressin in the evolution of the congestive heart failure and the potential therapeutic benefit of the AVP receptor antagonists.

Materials and Methods: The presentation represents an extensive literature review and is based on up-to-date information extracted from 4clinical trials: EVEREST, SALT 1 and 2, OPTIMIZE-HF.

Results: Patients affected by congestive heart failure (CHF) have high plasmatic levels of Arginine vasopressin even though they are hypervolemic with lower plasma osmolarity and serum sodium levels and this happens because of the lower effective of arterial blood volume, decreased cardiac output and Angiotensin II-induced AVP release. Arginine vasopressin exerts adverse effects in CHF by increasing vascular peripheral resistance via V1a Receptors and by enhancing water retention through V2 Receptors from renal collecting tubules. Furthermore, sustained stimulation of V1aR in the heart can lead to remodeling by stimulating cell hypertrophy and further deteriorates cardiac function. Therefore, blockade of the AVP system may prove as a useful adjunct or alternative to standard therapy in CHF. Currently there are 4 major compounds which are AVP-antagonists, 3 of them are selective antagonists of V2R: Tolvaptan, Satavaptan and Lixivaptan and 1 is a nonselective antagonist of V1aR and V2R: Conivaptan. Only Conivaptan and Tolvaptan are approved by FDA, the first one for treating hypervolemic and euvolemic hyponatremia and the second one for the treatment of CHF, liver cirrhosis and SIADH (syndrome of inappropriate antidiuretic hormone secretion).

Conclusion: According to the results of the clinical trials that were mentioned above, this new class of medicines is efficient in short-term regulation of hyponatremia and hypervolemia in congestive heart failure and may be used as an alternative for patients with resistance to diuretics. Long-term efficiency wasn't demonstrated and there are many questions that have to be elucidated regarding to this class of drugs.

Keywords: Arginine vasopressin, vaptans, congestive heart failure.

6. MICROSCOPIC CHANGES IN BLOOD CAPILLARIES IN HEMORRHAGIC VASCULITIS AND THE CORRELATION WITH THE DEGREE OF EXPRESSION OF IMMUNE REACTIONS

Cebanu Alexandru; Russu Eugeniu, M.D., Ph.D., associate professor, Department of Rheumatology and Nephrology, State Medical and Pharmaceutical University "Nicolae Testemitanu", Republic of Moldova

Academic adviser: **Zota Ieremia**, M.D., Ph.D., Professor and Chairman, Department of Morphopathology, State Medical and Pharmaceutical University "Nicolae Testemitanu", Republic of Moldova

Introduction: Henoch-Schoenlein Purpura is the most frequent vasculitis in pediatric patients usually with a self-limiting evolution. Still the evolution of the disease is hardly predictable with a possibility to acquire a severe clinical form. This paper had the goal to highlight the possible correlation between the severity of the degree of the histopathological lesions and the expression of markers of endothelial status and cellular and humoral immune status. Other researches with similar purpose were performed, but the analysis of the literature has shown that the results are contradictory.

Materials and Methods: To reach the goal, we have performed histopathological diagnosis and analysis of skin biopsies and we have evaluated the endothelial status, cellular immune status and humoral immune status.

Results: We founded a significant correlation between the degree of implication of microcirculation and the level of markers of the endothelial status.

Conclusions: The markers of the endothelial activation can be an alternative method in evaluation of the severity of disease and therefore of the therapeutical strategy, still more researches are necessary.

Keywords: Henoch-Schonlein Purpura, histopathology, endothelial markers, VCAM, ECAM.

7. METABOLIC CHANGES IN POLYCYSTIC OVARIAN SYNDROME

Cigoreanu Elena, Cigoreanu Ion

Academic adviser: **Stratulat Silvia**, Associate Professor, PI State University of Medicine and Pharmacy „Nicolae Testemitanu”, Chisinau, Republic of Moldova

Introduction: Polycystic ovary syndrome (PCOS) is a heterogeneous multifactorial disease characterized by menstrual disorders, chronic anovulation, hyperandrogenism, cystic changes in the ovaries and infertility. The syndrome is a condition with prepubertal onset, affecting especially women of childbearing age.

Objectives of the study were to elucidate the main etiopathogenic mechanisms, the criteria for diagnosis of metabolic changes and the most common complications in PCOS.

Materials and Methods: Relevant scientific articles regarding PCOS from medical databases were analyzed.

Results: The frequency of PCOS is estimated at 0.6-11% among gynecological diseases. PCOS is found in 1.5-20% women of childbearing age, 50-75% – with anovulatory infertility and 30-40% – with amenorrhea. Etiopathogenesis of PCOS remains unknown despite multiple studies. Decreased peripheral insulin sensitivity and consequently hyperinsulinemia are considered primary factors in the pathogenesis of PCOS. Insulin resistance and hyperinsulinemia are largely found laboratory symptoms of PCOS, insulin resistance being identified in 25% of middle-aged patients. Thyroid disorders also are frequently accompanying PCOS, highlighting the link between PCOS and autoimmune thyroiditis, rising concern that female hormones may play a role in triggering these diseases. Of all cases of thyroid pathology there were an increased frequency of cases of goiter (49.2%) and autoimmune thyroiditis (41.3%). Metabolic manifestations of hyperandrogenism were identified in PCOS: 42.8% of the patients had increased levels of plasma testosterone with normal urine excretion of 17-CS, 28.6% – the increase in both plasma testosterone as well as 17-CS excretion. In 14.3% of patients ovarian hyperandrogenia genesis was demonstrated only by applying the test with dexamethasone and chorionic gonadotropin, while in 9.5% of patients hyperandrogenia could not be demonstrated by hormone investigations. In 30% of cases PCOS was accompanied by secondary hyperprolactinemia.

Conclusion: Based on available literature data polycystic ovarian syndrome may be defined by the presence of hyperandrogenic (clinical and/or biochemical) and ovarian (oligo-, anovulation and/or polycystic ovaries) disorders. The main metabolic symptoms of PCOS are hyperandrogenism, hyperinsulinemia with insulin resistance, hypo- and hyperthyroidism and secondary hyperprolactinemia. Most common complications are impaired glucose tolerance and type II diabetes, cardiovascular disorders (dyslipidemia, hypertension, coronary heart disease) and risk of abortion or premature birth.

Key words: Polycystic ovarian syndrome, hyperandrogenism, hyperinsulinemia, insulin resistance, hypothyroidism, hyperthyroidism, secondary hyperprolactinemia

8. THE CLINICAL ANATOMY OF HEART. THE CORD RAPPORT WITH BACK MUSCLES AND COLUMN SPINE

Cojan Irina

Academic advasier: **Radu Turchin**, M.D, Ph.D., Associate Professor, State Medical and Pharmaceutical University" Nicolae Testemițanu, Chișinău, Republic of Moldova

Introduction: The heart is the engine of the body, being one of the main organs of the human body, placed in the median region of thorax. The heart is placed in the centre of the circulatory system, being a muscular organ which pumps blood in the human body. The circulatory system consists of arteries, veins and capillaries, which carry the blood from and to body regions.

Purpose and Objectives: To understand the great importance of the heart at clinical level and to apply the topographic anatomical knowledge about the vascularization and innervation of the heart and the influence of some muscle formation on the heart.

Results: The heart is the central organ of the cardiovascular system. It is situated in the mediastinum and has a triangular pyramid or a flattened cone shape, placed on the diaphragm. The heart axis is directed obliquely downward, toward the left. The heart wall is made of 3 layers, each one consisting of some neurovascular formations. They are of great importance. Arterial vascularization is provided by the coronary arteries, which originate in the right and left aortic sinuses. The big coronary arteries run on the surface of the heart and give subendocardial branches. The irrigation of the heart is made in diastole. The coronary arteries are classified as "end circulation", with little anastomoses between branches. The heart vascularization scheme: The right coronary artery: the inferior and posterior wall of the left ventricle, 1/2 posterior of the septum, the side wall of the right ventricle. Circumflex artery: the side wall of the left

ventricle. The anterior artery: the anterior wall of the left ventricle and ½ anterior of the septum. In the right ventricle the veins open. The left ventricle: at the level of the right and left semilunar valves is the origin of the coronary arteries. The veins are organized in a superficial and a deep system. The heart is innervated by parasympathetic and sympathetic fibers. The lymphatic drainage is assured by 3 plexus in the thacheobronchial and mediastinal lymph. It is important to understand the heart rapport with the spinal column, the ribs and back muscles. For the left ventricle, is projected at the T8-T9 level, the right auricle is projected at the second rib cartilage, the left one at the level of the third rib cartilage.

Conclusion: It is important to know the vascularization and innervation of the heart at clinical level and at surgical level. In cases of disorders of this system we can detect pathologies.

Keywords: Cord, vessels, nerves, column spine, back muscles

9. THE RELATIONSHIP BETWEEN RENAL VASCULATURE AND SURFACE ANATOMY

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Introduction: Kidney anatomy variations and malformation present an important field of study for fundamental as well as clinical sciences. The renal parenchyma along with its vascular supply has a tight embryological and developmental relationship. Renal fetal lobulation is considered as a rare variation of development. But the frequency of this anomaly is higher and can be associated with vascular variations. The presence of vascular variations can cause alteration in kidney circulation resulting in lobulated appearance of the kidney.

Purpose and Objectives: The purpose of the study is to show that fetal lobulation is a more frequent structural variation and is usually associated with vascular developmental changes.

Material and Methods: The study was performed using macroscopic dissection of 48 kidneys along with their vessels. The acquired data were analyzed using Statistical Package for the Social Sciences.

Results: Renal vascular anomalies are quite frequent but they are rarely accompanied by changes in the organ. The frequency of fetal lobulation is 0,5-1% in the current data. Our results indicate that this normally can be encountered much more often. Out of the 48 kidneys 13 had some degree of fetal lobulation on their surface representing 27.09% of cases. From 13 kidneys bilateral fetal lobulation was identified in 8 (61.5%), 5 kidneys had unilateral lobulation (38.5%). 9 kidneys (69.23%) had variations in the development of blood vessels, from which 6 specimens had a superior polar artery, 1 specimen - presegmental branching of the renal artery, 2 specimens had two renal arteries.

Conclusion: Fetal lobulation is a more frequent variation of development than it is usually described in the literature. Our data indicates that quite often (69.23%) fetal lobulation is accompanied by some degree of vascular variation of development which can be polar or additional arteries as well as presegmented branching of the renal artery. This knowledge can be useful in different diagnostic procedures in order to determine the possibility of vascular anomalies as well as other changes in the excretory system.

Keywords: Renal morphology, renal vasculature, renal fetal lobulation

10. STEM CELLS FROM THE AMNIOTIC FLUID , CHARACTERISTICS OF PROLIFERATION AND DIFFERENTIATION.

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Introduction: Regenerative medicine has as a basis the study of stem cells and is one of the newest branches of contemporary medicine. It revolutionizes and lengthens life expectancy but directly and point out the quality. Stem cells are non-differentiated cells or non-specialised and have

the ability to divide indefinitely, so this property has been used as a pillar and in search of new methods of treatment for previously incurable diseases.

Purpose and Objectives: Determination of cellular component of the amniotic fluid, studying the protocol for obtaining stem cells from amniotic fluid, and characterization of cellular component.

Material and methods: The study is made on the basis of 10 sources of amniotic fluid. Amniotic fluid is collected via amniocentesis or amniotic bag punctia. Amniotic fluid is centrifuged under the Protocol MLPA. Then the liquid centrifuged is fixed on the blade glass and studied under a microscope.

Results: Biological function of adult stem cells is to contribute to the healing process. Present cells in the amniotic fluid have origin of the embryo as well as outside of embryo. A mixture of morphological aspects, limited biochemical criteria, and growth characteristics led to the classification of amniotic fluid cells, which attach and form colonies under routine culture conditions, into three major groups: epitheloid E-type cells; amniotic fluid specific AF-type cells; fibroblastic F-type cells. Human amniotic epithelial cells constitute the inner layer of the amnion and are formed from the amnioblast on the eighth day after fertilization. It has long been proposed that Human amniotic epithelial cells could have the potential to differentiate into a wide variety of different organs, including heart, liver and brain.

Conclusion: Amniotic cells have a very strong growth rate, and sometimes their evolution cannot be kept in check. Amniotic fluid is a rich source of mesenchymal stem cells derived, and are similar to both embryonic stem cells and adult stem cells can differentiate into several cell types. Stem cells from amniotic fluid can be stored in banks, similar to umbilical cord blood stem cells, and have high rate of reproduction and can be operated without loss of chromosome integrity.

Keywords: Amniotic fluid cells, human stem cells, amniocentesis

11. USING RABBITS AS EXPERIMENTAL ANIMALS FOR MODELING APPENDECTOMY DURING PRACTICE-ORIENTED TRAININGS AS AN ALTERNATIVE TO ENGAGING IN AN EXPERIMENT DOGS

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Introduction: Among the diseases of the abdominal cavity, requiring immediate surgery, the most frequent acute appendicitis. In connection with the execution of the rules of the obligation of experimental work in experimental animals, we are unable to demonstrate the technique of appendectomy on dogs because it is considered appropriate to use rabbits as an alternative to engaging in an experiment with dogs.

Purpose and Objectives: To compare the topographic-anatomic location and structure of the appendix of a rabbit with a human, as well as to simulate and compare the stages of appendectomy.

Materials and Methods: After studying and analyzing the literature data concerning the location and topographic anatomical structure of abdominal viscera in a clinically healthy rabbit, and the study of this is done in the anatomical dissection of the rabbit, we have carried out a number of appendectomies in experimental animals as follows: after general anesthesia by intramuscular injection of 10% solution of sodium thiopental (0.5 ml per 1 kg of body weight), was carried out fixing the animal and site preparation section. The abdomen was opened through a midline incision average. Peritoneum is isolated gauze. Conducted an audit of the abdominal cavity. Finding the cecum with vermiform appendix removed the min to the wound. Further mobilization process was carried out, direct ligation of the segmental branches outside the walls of the appendix, and the vessels going to the adjacent intestinal loop, and bandaging the appendicular artery. After mobilization, the base of the appendix with silk ligature was applied, above which the process of crossing. Stump was treated with 5% solution of iodine. Inspection has been performed and hemostasis layers sutured abdominal wall.

Results: Comparison of topographic and anatomical features of the location and structure of the appendix with a human rabbit showed that these anatomical structures are very close. Accordingly, the technique of surgery carried out was close to an appendectomy in humans.

Conclusions: Based on the comparison of topographic and anatomical peculiarities of the location and structure of the appendix, as well as of surgery in rabbits can be concluded that the use of rabbits as experimental animals for modeling appendectomy during practice-oriented training as an alternative to engaging in experimental dogs is reasonable and will allow students to virtually secure knowledge of the topic and to gain practical experience of surgical intervention.

Keywords: Appendectomy, rabbits, experiment

12. INDIVIDUAL FEATURES OF THE AORTIC ARCH BRANCHES

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Introduction: Human artery is characterized by marked individual differences. They are characterized by an unequal number of major vascular routes, sources of blood supply to organs, different shape and branching features topography. A high incidence of human circulatory system necessitates the use of frequent surgical and diagnostic procedures. In this regard, the question arises of more in-depth study of the vascular bed of the human body, including the arteries and variant anatomy, their topography and branching. It should be noted that in recent years the study of the arterial bed of the human body makes it increasingly possible to observe options vessels, unlike those described in classical textbooks, which, undoubtedly, can aggravate the course of the operation. Not in all cases can be performed preoperative angiographic diagnosis of arteries, so the physician should be prepared to the individual characteristics of the arterial bed. In the literature there is a description of the different data about option vessels other than classical. So, A.M. Ochkurenko (1966) in 13% of cases found that two arteries departed from the aortic arch: brachiocephalic trunk and left subclavian artery. Less common variants have been described in the literature, refer to the vertebral arteries from the aortic arch of, with more than the left. In this case the aortic arch gave four branches. R. L. Herzenberg (1930) an interesting variant described, in which the right internal and external carotid arteries departed from brachiocephalic trunk. In this case the common carotid artery was absent. Our study was conducted at the Department of the normal anatomy of the Grodno State Medical University. We examined 11 human cadavers of both sexes in different age groups (45-75 years). The research was carried out using the following methods: dissection, morphometry. On one of the studied drugs was discovered nonclassical variant of the branch of the aortic arch, in which there is no brachiocephalic trunk. Vessels departed from right to left in the following order: right common carotid artery, left common carotid, left subclavian, right subclavian. Right subclavian artery departed behind the left homonymous by 10 mm, turned right and passed between the trachea and the esophagus, thus bending the esophagus at the distance of 41 mm from its origin. Thus, analyzing the results, we can conclude that not only small and medium-sized arteries are subjected to considerable variability, but large main trunks, which certainly must be taken into account both in practical training sessions and in the practice of medicine.

Key words: Variant, artery, arch of aorta

13. SALIVARY CYSTATINS – BIOLOGICAL ROLE AND DIAGNOSTICAL VALUE

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Introduction: This paper provides insights of the latest studies regarding the structure, properties and function of cystatins belonging to family II, salivary cystatins in particular.

Materials and methods: Relevant articles on the topic for the period from 1996 to 2013 were analyzed, using PubMed database and the following key words: cystatins, cysteine proteases, and salivary cystatins.

Results: Nowadays the cystatin super family is known to comprise about 30 members. The members of cystatin family II –cystatin C, D, S, SA, SN, E/M and F, are found in body fluids. Their involvement in inflammatory processes, cancerogenesis and metastasis, bone remodeling and in other processes has been undoubtedly demonstrated. Cystatins S, SN and SA were found in submandibular and sublingual glands, while cystatin D was detected only in parotid glands. Salivary cystatins S, SN, SA and D contribute to the maintenance of the oral health through the inhibition of endo- and exogenous cysteine proteases, antimicrobial and antiviral protection and regulation of hard tooth tissue remodeling.

Conclusions: Studies of major significance attest the clinical utility of cystatins' assay (cystatin C) for the diagnosis of some diseases (for ex. renal failure). In addition, cystatin C, among other cystatins, decreases the formation of osteoclasts by interfering at a late stage of pre-osteoclast differentiation. Cystatin D is produced by the parotid gland and is secreted through blood serum to the whole body, similar to a hormone, and thus there are set new research directions of cystatins as markers of diseases, including the ones causing oromaxillofacial pain, prosopalgia, and the monitoring of disease's evolution and of treatment efficiency.

Key words: Cysteine proteases, cystatins, salivary cystatins, disease marker

14. GENETIC HETEROGENEITY OF DEAFNESS AND ITS PRACTICAL IMPLICATIONS

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Introduction: The fundamental process involved in audition is controlled by hundreds of genes, 69 of which are known: 24 AD, 40 AR, 2XL, 3 mitochondrial. Mutant alleles of these genes may determine hereditary deafness. Loss of hearing is etiologically heterogeneous, 2/3 of childhood onset deafness being of a genetic cause. The prevalence of bilateral sensorineural deafness (≥ 40 dB) is 1:500 healthy new-borns. More than 50% of prelingual deafness is of genetic origin, 70% of which is nonsyndromic, from which 85% is autosomal-recessive. About 400 syndromes include deafness as a component of its phenotype. In Republic of Moldova, deafness holds 3rd place in the structure of disability, number of hearing impaired children being more than 2000.

Purpose and objectives: Analysis of molecular-genetic aspects of deafness and subsequent implications. Objectives were defined as: (1) systematic review of scientific literature regarding epidemiology, genetic heterogeneity, diagnosis and consequences of hereditary deafness; (2) analysis of deafness incidence in Republic of Moldova; (3) elucidating critically the practical implications regarding genotype variations of hereditary deafness.

Materials and methods: The study group was prospectively selected during 2013/14, from deaf patients at Republican Center of Audiology. Patients filled up a questionnaire at discharge. Additionally to cases (patients with hereditary deafness), were randomly selected an equal number of controls (patients with non-hereditary deafness).

Results: The study group consisted of 10 cases and 10 controls, with a mean age of $5 \pm 2,22$ years, 65% females. Mean age of diagnosis was $2,3 \pm 1,49$ years, being fit into maximal plasticity period of central auditory pathways. The count of sensorineural deafness in hereditary group represented 90%, with a single case of transmission hearing loss, bilateral in 90% of cases and 10% of controls, with a postlingual onset in 70%. Pedigree analysis of cases showed 90% AR transmission pattern, and 10% AD.

Conclusion: (1) The cause of deafness may be clinically suspected due to anamnesis and syndrome association, but substrate confirmation should be done with molecular-genetic tests. Although family history can help suspect the genetic cause of deafness, absence of hearing-loss anamnesis at family members does not mean that hearing impairment is not of genetic origin. (2) Recognition of genetic heterogeneity is important in clinical diagnosis, prognosis and genetic counseling regarding recurrence risk.

Keywords: hereditary deafness; connexin-26; sensorineural hearing-loss

15. LEGAL SUPPORT OF DOCTORS THROUGH OF THE STUDY OF MEDICAL LAW

Fursa Olena

Academic adviser: **Verlan-Kulshenko Olena**, deputy head of the medical law, Department of Anatomical pathology, Forensic pathology and Medical law, National Pirogov Memorial Medical University, Vinnytsya

Introduction: "Competence" is the "basis" of professionalism, the basis on which "grows" the skill of a professional. Every doctor should know their rights and obligations. The doctor should be guided by the basic document for the healthcare industry - Law of Ukraine "Fundamentals of Ukraine on Health Care" November 19, 1992. Legal awareness is defined as a form of consciousness, a certain thought process, in which the comprehension of the essence of law. Today is very low legal, social and economic security of health workers as a result, a decrease qualifications of doctors. Social, economic and legal protection of the professional activities of health workers is possible through the introduction of insurance professional activities. Insurance system is best developed in Germany. In Ukraine system insurance health is not developed.

Purpose and Objectives: The main goal of this research is to improve and develop scientific understanding for the category of legal consciousness doctor determines the place and role of the concept of justice competent doctor in the structure of legal consciousness.

Materials and methods: Constitution of Ukraine, the current legal and other acts, procedural rules which govern the relationship for consolidate the general concepts of competence of medical workers, booklets GMC (General Medical Council of Great Britain): "Privacy, protection and provision of information," the fifth book in Germany Social Code (SGB V2). The reliability and validity of research results based on the use of philosophical and ideological approaches to the study of the nature of competent legal awareness, general and special-scientific methods of research. To assess the role of law in the modern medical system health. Conducted a survey among medical students in VNMU.

Results: Most respondents believe that the most effective medical law for the professional interests of medical professionals, social and legal protection of medical workers. Many students VNMU consider the quality of teaching medical law is excellent.

Conclusions: Every doctor should have the competence approach - a set of general principles, set goals and find ways to achieve effective results in their professional activity. Today is a very low legal, social and economic security of health professionals. Medical institutions, doctors and patients do not feel the judicial protection of their rights. Now, there are important questions about the need for early preparation and adoption of a structured package of social and economic protection of medical workers, especially doctors who have a risk to their health.

Keywords: Competence, medical insurance, Germany Social Code (SGB V2)

16. DRUG INTOXICATIONS AND THEIR TREATMENT

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Introduction: Although drugs are used for prevention, amelioration or treatment of certain diseases, they represent a certain risk for those who use them. The consumption of drugs has grown tremendously and continues to grow worldwide, so it is virtually impossible not to overuse drugs and self-medication, generating a range of negative effects, represented by adverse reactions, drug poisoning, which complete a new disease of civilization – „drug disease”.

Purpose and objectives: Achieving a complex study on the epidemiology, clinical manifestations, diagnosis and principles of treatment of drug intoxication.

Patients: This study included 2260 patients' data files with diagnosis of drug intoxications during the years 2011, 2012, 2013.

Methods: Findings of epidemiological characteristics, etiology, clinical features of acute drug

intoxication addressed to the Republican Center of Toxicology. Evaluating statistics for 3 years and highlighting the prevalence of drugs, age and sex more frequently involved in drug intoxication.

Results: During the years 2011-2013 were recorded 2260 cases of intoxications. Every year their number is constantly growing (666 cases in 2011, 744 cases in 2012 and 850 in 2013).

Men frequently suffer from poisoning (due to alcohol consumption), but in 2013 the number is equivalent to that of women. Drug intoxications are found more frequently in women (185 cases in 2013). The highest rate of drug poisoning was represented by neuroleptics, antihistamines and benzodiazepines. We observed a significant increase of intoxications with NSAD in the years 2011, 2012. Serious complications or deaths were not recorded, due to qualified therapeutic care and resuscitation.

The causes of drug intoxications are evident for our country. Most of the patients lack financial resources, don't seek specialized medical services and have free access to drugs, this facts increasing the rate of self-treatment, that include multiple risks for their life. A significant part of drug intoxications were due to suicide.

Conclusion: Drug poisoning is the result of self-management and uninformed use of drugs, frequently for suicide. There should be a culture of drug use and fastest possible resolution of the serious consequences that involve them. This problem should include a multidisciplinary approach, both therapeutic as well as psychosocial.

Keywords: drug intoxication, risks, multidisciplinary approach

17. LEGAL REGULATION OF PROVIDING MEDICAL SERVICES THROUGH TELEMEDICINE: REALITIES AND PROSPECTS IN UKRAINE

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Introduction: Telemedicine today – is providing medical care at distance by means of information and communication technologists of promote global health, medical care (diagnosis, treatment and prevention of diseases) as well as teaching, administration and research in medicine.

Purpose and Objectives: To describe and define the legal provision of scheduled telemedicine projects in Ukraine, namely realization telemedical consultations with the provision of the results of instrumental examination of patients.

Materials and Methods: The Constitution of Ukraine, the Civil Code, the Law of Ukraine "Fundamentals of Ukraine on Health Care," "On Access to Public Information", "On Personal Data Protection". Methods: Compare a tivellegal, formal logical, systematic and structural.

Results: According to Article 10 of the Law of Ukraine "On Access to Public Information" every person has the right to know, when collecting information priorities use that information about and for what purpose used, transmitted or distributed. And the right on compensation for disclosure of that person. The development of telemedicine in Ukraine is dialectical in nature. On the one hand, it is possible to obtain medical care for patients in every part of the country, on the other – it is the availability of legal leverage over the health care worker to protect the personal data of the patient and their practical application.

Separately, when considering this issue there is a problem directly telemedicine to provide such services as online consultations in real time, review and analysis of selected clinical situations in which the process of medical care group of doctors in case of emergency conditions the patient consults with experts on related disciplines, thus using his personal information to submit personal data to thirds ideprior agree men with him (her), thus violating Article 10 of the Law of Ukraine "On Access to Public Information". Thus the patient can no to be sure that its personal data are transmitted truly medical professionals.

Conclusions: To date, Ukraine providing medical services through telemedicine and legal support areat a rudimentary level, which requires the establishment of an appropriate regulatory frame work to protect, first of all, the rights of patients.

Keywords: Telemedicine, Article 10 of the Law of Ukraine "On Access to Public Information"

18. EXPRESSION OF *c-fos* AND NO-SYNTASE ACTIVITY IN MOTONEURONS AND INTERNEURONS OF THE RAT'S SPINAL CORD

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Introduction: The problem of the implementation of the accuracy and efficiency of motor skills is important in the producing of professional movements of any person, in sports, music, medicine, and particularly in post-stroke rehabilitation. Muscle proprioceptive impulses play an important role in the functioning of spinal motor centers. Excitable and inhibitory interneurons in dorsal and ventral horns of the spinal cord are important components of structures, which monitor physical activity. We have studied the expression of *c-fos* and NADPH-diaphorase-reactive neurons in the cervical spinal segments of rats.

Materials and Methods: Six male Wistar rats were examined. Operant motor activity was realized in the course of 12 everyday 30-min-long training sessions. After 2 hours of the last training, all experimental rats were intracardially perfused through the ascending aorta. Fos-immunoreactive neurons were visualized immunohistochemically in the C6/C7 spinal segments in rats trained for operant movements. Fos-immunoreactive nuclei were revealed with standard avidin-biotin-peroxidase method, which used polyclonal rabbits' antibodies directly against nuclear c - Fos protein. Histochemical labeling of neurons based on the detection of NADPH-diaphorase.

Discussion results: There were registered small number of *fos*-immunoreactive nuclei in C6/C7 segments of spinal cord of animals. The designated neurons were found in different layers of the gray matter, but in the motor nuclei (layer 9) and in the lateral spinal nuclei (LSp) *fos*-immunoreactivity was registered in few number of cells. Cells containing c-Fos protein and NO-synthase are simultaneously identified as double staining neurons.

Conclusion: The results of research of spatial and quantitative characteristics distribution of motoneurons and interneurons that were activated in the cervical part of spinal cord of rats after repeated realizations of food extractive movements are presented in this work.

Key Words: *c-fos* expression, nitric oxide, spinal cord, operant reflex, rat

19. THE PROBLEM OF PRESERVATION OF CONFIDENTIALITY WHEN WORKING WITH TB PATIENTS

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Introduction: Medical secret is information that does not have the right to be disclosed by the medical workers and other persons in connection with the performance of their professional or official duties became known about the state of health, illness, and the fact of asking for medical advice, diagnosis, medical examination, inspection, and their results, intimate and family aspects of person's life, a medical secret is one of the main problems to solve this issue as tuberculosis prevention on the one hand, and preserving the privacy of personal life, his health, on the other. Because TB in Ukraine and in the world is common. About 1.8 million deaths from various forms of tuberculosis are stated annually in the world.

Purpose and Objectives: To review the legal framework to ensure confidentiality when working with TB patients, to identify issues and their solutions.

Materials and Methods: Legislative acts (the Constitution of Ukraine, laws of Ukraine on health protection, the criminal code of Ukraine, the Family code of Ukraine), statistics on the incidence of tuberculosis in Ukraine. Methods: comparative legal, statistical, forecasting and epistemological.

Results: It is prohibited to demand and serve at the place of work or study information about diagnosis and treatment of the patient. For unlawful disclosure of information by the current

legislation stipulates responsibility according to 145 of the criminal code of Ukraine. In the legislation of Ukraine is noted that responsibility for disclosure the information on the health status of the patient are not drawn: the brides and the parents of children up to 14 years, the legal representative, doctor's of SES, who revealed the secret with the purpose of elimination of employment and training of TB patients, the doctors, the disclosure of classified information at the request of persons engaged in the production investigator — prosecutor, court. When conducting tuberculosis chemoprophylaxis the contact persons to preserve patient confidentiality becomes almost impossible. According to the instructions of the Ministry of health order № 499 dated 28.10.2003 aid to TB patients, a group of people who are in contact with persons, who are contagious people are held chemoprophylaxis, vaccination of uninfected children with BCG.

Conclusion: Thus, the issue of preserving in secret the information about the diagnosis and course of the disease tuberculosis is complicated enough. So, trying to minimize the risk of disease is quite difficult to observe complete confidentiality. Current legislation does not ensure full observance of medical confidentiality.

Keywords: Medical secret, Tuberculosis

20. PATHOMORPHOLOGICAL SIGNS OF INTRAUTERINE INFECTION

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Introduction: Intrauterine infection (IUI) is characterized by high prevalence and diversity of morphological manifestations which appear in the biological system mother - placenta - fetus.

In this regard, the university not only can pose a serious threat to the normal development of pregnancy, but often bring harm to the health of pregnant women and the further implementation of reproductive function. High practical importance IUI led to growing interest to specialists on infectious diseases placenta, fetus and newborn.

Purpose and Objectives: The aim of our work is the analysis of recent literature data and the results of their own research (materials PDVinnitsa 2007 - 2011.) and identify the main morphogenetic mechanisms of IUI.

Results: Intrauterine infection is one of the most important problems of modern pediatrics. There are 4 main ways of placental infection: ascending, hematogenous, contact, descending. Ascending path leads to the development of inflammatory reactions in the tissues of the litter. Among the microorganisms that cause infections of the rising of the pregnant uterus and membranes have a wide range of opportunistic bacteria, including *E. coli*, fecal staphylococci, hemolytic streptococci group B, *Staphylococcus aureus*, gonococcus, *Corynebacterium*, *Campylobacter*, *Klebsiella*, *Pseudomonadaaeruginosa*, mycoplasma, chlamydia and others. Also significant role is played by anaerobic bacteria, fungi of the genus *Candida* yeasts. A characteristic feature of ascending infection in pregnant women is a form of exudative inflammatory reaction (serous, purulent, fibrinous), a substantial role violation vaginal biocenosis and pathological conditions of the cervix. Hematogenous route of infection is most typical pathogens core group TORCH-infections, toxoplasmosis, rubella, cytomegalovirus, herpes simplex, and others. Thus the prevailing productive inflammation.

Downturn theoretically is an acceptable way to infections in pregnant women with areas of active inflammation in the ovaries and fallopian tubes (gonorrhoea, mycoplasma, chlamydia).

Conclusion: Contact fetal infection may develop during birth when the newborn, placenta and membranes fruitful encounter with an infected birth canal contents. So, in newborns occur gonorrheal conjunctivitis, chlamydial and mycoplasma vulvovaginitis, herpetic and bacterial dermatitis. Existence single biological system mother-placenta-fetus is the basis for selection in the pathogenesis of IUI "parent", "postpartum" and "productive" stage.

Keywords: Intrauterine infection

21. COMPETENCE OF THE MEDICAL WORKERS IN THE CONTEXT OF NATIONAL LEGISLATION

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Introduction: Dynamically changing system of social and professional values in Ukraine, leads to a rethinking of many traditional categories. The new categories include legal jurisdiction that is a part of justice is not only a media specialist legal knowledge, but also by a number of professionals who, because of their activity strictly regulated by the law, in fact, all their activities are confined mainly to the implementation of an algorithm for action described in the regulation. These professions include medical professionals.

Purpose and Objectives: To analyze compliance with the legal concept of competence as a necessary component of the health care worker, to justify the need for the introduction of this definition in a number of legal acts in the field of health care.

Materials and methods: The analysis includes the Constitution of Ukraine, the Civil Code of Ukraine, the Penal and Criminal Procedure Code, the Law of Ukraine "Fundamentals of Ukraine on Health" and other laws.

Results: The subject of justice is a competent person who has no legal training, but has a high level of knowledge of law and skills as they apply. Particularly acute problem of determination of the legal competence of the employee exists in the health care system. This is due primarily to the reform of the industry, and the emergence of a new legal system of mutual responsibility between doctor and patient. The legal competence of health care worker is regulated by articles of the Constitution of Ukraine, the Civil Code of Ukraine, the Penal and Criminal Procedure Code, the Law of Ukraine "Fundamentals of Ukraine on Health" and other laws. However, none of them defines the concept of legal competence and its boundaries, which causes excess medical professional for their office or through the «blurring of competence» creates the conditions for submission to medical requirements, other than those of his immediate obligation relations. However, for health professionals play an important role the implementation of legal provisions and implementation knowledge of local regulations - treatment protocols and the ability to compose documents of legal significance, such as death certificates, autopsy acts, acts of forensic medical examinations, wills and more.

Conclusions: More conscious health workers will be treated to an understanding of the role and place it in the case of legal mechanisms for the regulation of the professional activity, the more comfortable and relaxed they work, the less complaints and lawsuits will respect the rights and legitimate interests of patients.

Keywords: legal competence, legal consciousness

22. LAW REGULATION PROVIDING MEDICAL CARE FOR HIV-INFECTED CHILDREN IN SECONDARY SCHOOLS OF UKRAINE

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Introduction: Children's health is a priority responsibility of the state, as defined in the UN Convention on the Rights of the Child, the Constitution of Ukraine and a number of laws and regulations. That is why every school should regulate medical centers. Particularly acute issue of the rights of HIV- infected children in the process of realization of the right to education.

Purpose and Objectives: To reveal the features of health care pupils in secondary schools; isolate the problematic issue of rights of Health HIV - infected children in secondary schools in Ukraine.

Materials and Methods: The analysis includes the "Basic Laws of Ukraine on Health", Law "On General Secondary Education", "On Protection of Childhood", "Instructions on how to provide medical and social care for HIV- infected children". In the course of our study the epistemological, comparative legal, statistical, forecasting, sociological methods have been applied.

Results: There are two ways of opening medical clinics in schools alone - through licensing or through the initial establishment of public health - clinics. Since the complex process of obtaining a license, most schools go through an agreement with the clinic. Thus the results of our survey showed an inadequate provision of medical care at school. In particular, the majority of pupils surveyed (85%) say that schools are provided with medicines, but along with that there are other problems: first of all, schools should run a clinic every day from 8:30 to 16:00 hours, rather than two - three o'clock twice a week (35%). In addition, 10% of the pupils do not even know where the school clinic is. After analyzing the features of the right to the protection of the health of HIV - infected children in the schools, we found a number of problems which are not addressed in Ukrainian legislation. In Ukraine, the most common is the disclosure of information on the status of HIV - infected child is not regulated right to store information on the diagnosis by the staff of the school.

Conclusions: Thus, analyzing the current legislation which regulates the provision of medical care to children in secondary schools and regulates the most important issues in the protection of the rights of HIV -infected children, we can conclude that in general, it meets international standards. However, some areas of relationships, for example, education and training of HIV - infected children in general medical care of minors is unsolved and require further development.

Keywords: HIV-infected children, secondary schools of Ukraine.

23. SECONDARY LIVER OSTEOPOROSIS

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Introduction: Liver diseases, in particular the chronic one, directly and/or indirect alter bone metabolism and composition. Osteopenia and osteoporosis develop, which are generically called hepatic osteodystrophy. Therefore, an assessment of bone metabolism, of the risk factors of hepatic osteodystrophy and bone mineral density measurement are recommended in patients with chronic liver disease. An early diagnosis of hepatic osteodystrophy is essential for the correction of the modifiable risk factors that predispose to bone loss and for the prevention of the fragility fractures.

Purpose and objectives: Was to perform a comparative study of bone mineral composition and of its changes at different stages of postnatal ontogenetic development in physiological conditions and experimental hepatic osteoporosis.

Materials and methods: The study was conducted on a sample of 60 white laboratory rats of both sexes without pedigree. The animals were divided according to their age in 3 groups, each one consisted of 2 subgroups – control and with secondary liver osteoporosis. The amount of calcium, phosphate, magnesium, zinc and copper was determined in the bone.

Results and discussion: The results analysis show that under physiological conditions the ontogenetic changes of bone mineral content is considerably influenced by gender: at the initial ontogenetic stages the mineral elements content is higher in females compared to males. We determined that experimental liver osteoporosis induced by long term CCl₄ intoxication is characterized by a relative conservation of bone apatite cardinal elements – calcium and phosphate, content at all ontogenetic stages. At the same time, the level mineral regulatory, osteotrope elements (magnesium, zinc and copper) was more sensitive and were significant differences between animals at various ontogenetic stages.

Conclusion: Preservation of calcium, phosphate and sulphate in secondary liver osteoporosis reveals a significant degree of tissue adaptation to CCl₄ action oriented to maintenance of the hardness, resilience and functionality of bone. The content of these minerals is closely related due to the ability of the negatively charged sulfates to fix the labile fraction of bone calcium and thus

maintain its functional accessible reserve of the tissue. This particular reserve is used to restore the normal apatite crystal lattice during the bone remodeling processes and the processes of recovery of bone mineral composition in various pathological conditions.

Key words: Osteoporosis, liver diseases, experimental secondary liver osteoporosis, mineral elements

24. CARDIAC SHOCK-WAVE THERAPY. A NEW METHOD OF THERAPEUTIC REVASCULARISATION OF THE HEART

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Introduction: CHD is the leading cause of death throughout the world. Over the past 10 years in Ukraine mortality rate from cardiovascular disease has been 65%, in Moldova - 57%, when in the world ~ 30%. Despite a large variety of medicines to achieve long-term therapeutic results these are obtained in only a few cases. Unlike from the traditional methods of treatment, shock wave therapy has several advantages, which will be discussed in this work.

Purpose and Objectives: The aim of this research was the study of innovative, safe and effective treatment of CHD - SWT. The study of method myocardial regeneration, angiogenesis, stem cell transplantation into the myocardium to patients with myocardial infarction.

Materials and methods: SWT method has long been used in urology and orthopedics. In case of using in cardiology, acoustic wave energy is less than ~ 10 times, which ensures the safety of the method. In this work I used the experimental data modeling of biological models and clinical studies of patients' activated in the regional cardiac surgery center "of the city of Odessa. Statistical processing of data were carried out using Student t-test.

Results: SWT is based on mechanical stress in focus zone by transmitting an acoustic wave energy. The result of the acoustic wave is growth the amount of mRNA which encodes the NO-synthase (eNOS), leading to vasodilatation and better circulation. It was also found that improvement of blood flow in the capillaries entails release vascular endothelial growth factor (VEGF), increase of flow circulating stem cells into the ischemic zone, and increase the number of new capillaries. As a result, on the periphery of destruction – there is observed cellular hypertrophy of cardiomyocytes. In the area of ischemia is observed replacement of myocardial tissue by connective tissue with atypical architectonic microvasculature due to angiogenesis.

SWT application results became:

- 1) Reduction of the functional class of angina
- 2) Reduction of usefulness of nitrate
- 3) Growth of tolerance to load
- 4) Improvement of myocardial perfusion SPECT in this
- 5) Improvement of LV function according to echocardiography

Conclusion: Results of experimental and clinical studies allow characterizing SWT as a safe and highly effective method in treatment in patients with coronary artery disease.

Keywords: shock-wave therapy, coronary artery disease, angiogenesis

25. DECISION OF THE EUROPEAN COURT OF HUMAN RIGHTS IN THE HEALTH SECTOR IN THE CONTEXT OF UKRAINIAN LEGISLATION

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Introduction: The political section of the Ukraine–European Union Association Agreement (a treaty between the European Union and Ukraine that establishes a political association between the two parties) was signed on 21 March 2014. Thus, the Association Agreement should be applied

by national courts, as well as national legislation. At the same time, International law should be used if this law contradicts core elements of the national legislation, according to the principle of the primacy of International law.

Purpose and Objectives: Review the progress of implementation and convergence of Ukraine's legislation with the current European legislation in the context of the European Court of Human Rights judgments in Healthcare arising with non-compliance and conflicts between domestic and European law.

Materials and Methods: Were analyzed certain articles of the Constitution of Ukraine, of the Convention for the Protection of Human Rights and Fundamental Freedoms; Law of Ukraine "On the implementation of the decisions and practices of the European Court of Human Rights", the Decree of the President of Ukraine "On Approval of the Strategy for Ukraine's integration into the European Union."

Results: According to the Constitution of Ukraine, the Law of Ukraine "On International Treaties and Agreements", international treaty ratified by the Verkhovna Rada of Ukraine is part of the national legislation of Ukraine.

However at the end of 2012 Ukraine was on a fifth place after an amount of the given lawsuits in the European court (complaints about Ukraine - 10 400 - represented 7.5% of the total number of cases to the European Court). The main reason for complaints was the exhaustion of domestic remedies, due to inconsistency and conflict between domestic and European law.

In the practice of the European Court in the cases against Ukraine these issues discussed in the following areas:

- 1) Violation of the right to protection from torture and cruel and degrading treatment.
- 2) Violation of the right to liberty and security of person on admission to psychiatric institutions.
- 3) Violation of the right to fair justice.

Conclusion: Before Ukraine stands an urgent task to improve the legal base in the field of health protection, to bring it to conformity with the requirements of International law, to reform the entire health care system, taking into account the fundamental principles of the international legal instruments on human rights, global politics and tendencies in health care, but adapting them to the political, economic and social realities of our lives.

Keywords: European Court, International Law and Domestic Law

26. MOLECULAR MECHANISMS IN PATHOGENESIS OF CANCEROGENESIS

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Introduction: The study of molecular mechanisms in the pathogenesis of cancerogenesis is caused by the fact that at this stage, the fight against cancerogenic pathologies has insufficient means of prevention, diagnosis and treatment. We still hope that in future the tumors could be explained, controlled and treated.

Purpose and objectives: To provide an overview of the bibliography of Molecular Mechanisms in cancer's pathophysiology, which will serve as a point of initiation in the prophylaxis and treatment of malignant tumors. In achieving our goal, we have to:

1. explore the role of genes responsible for carcinogenesis;
2. find out the role of growth factors and cellular proliferation in carcinogenesis;
3. discover the role of apoptosis in carcinogenesis;

Materials and methods: The basis of the research was a bibliographic review of the main work, which reveals the pathogenesis of carcinogenesis. The sources we used are: textbooks, monographs, handbooks, applied publications, standards, patents, reports, theses, statistical reports, indexes and summary documentation. The stages of study were:

1. Introduction in the topic of the research;

2. Researches of different sources;

2. Processing and interpretation of selected ideas from bibliography;

Results: A proto-oncogene is a normal gene that can become an oncogene due to the mutations or to the increased expression. A suppressor gene of tumor (an antioncogene), is a gene that protects the cell from the first step of the development of cancer. When these mutant genes cause the decrease of their function, the cell can lead to cancer, usually in combination with other genetic changes. Both the activation of ras oncogenes and the inactivation of several suppressor genes, including p53, have been observed in the development of human colon and lung tumors. The point mutations in key codons can activate ras proto-oncogene may occur at various stages of the carcinogenetic process. The mechanisms that include impaired expression of proto-oncogenes are manifested through gene amplification and chromosomal translocation or gene rearrangement. The amplification of proto-oncogenes is usually associated to late stages of tumor progression. The apoptosis is a cellular process that occurs in physiological and pathological conditions. Reduced apoptosis or its resistance plays a vital role in carcinogenesis. There are many ways a malignant cell to acquire reduction in apoptosis or apoptosis resistance. Generally, the mechanisms by which evasion of apoptosis occurs can be broadly divided into:

1. disrupted balance of pro-apoptotic and anti-apoptotic proteins

2. reduced caspase function

3. impaired death of receptor signaling the activation of growth factor that signal pathways through genetic alterations affecting these genes, contributes to the development and progression of many human cancers. The growth factors, defined as polypeptides that stimulate cell proliferation, are major growth-regulatory molecules for cells in culture and, probably, also for cells in vivo. The decreased requirement for specific growth factors is a common occurrence in neoplastically transformed cells and can lead to a growth advantage, a cardinal feature of cancer cells.

Conclusion: The study of the molecular mechanisms of carcinogenesis plays a main role in the development of new methods of diagnosis and treatment of cancer. The molecular mechanisms involved in carcinogenesis serve as oncogenetic markers used in modern techniques of diagnosis with high specificity. The drugs targeted on the elimination of pathological molecular mechanisms involved in carcinogenesis, find their place progressively in the treatment strategies of cancer.

Keywords: Cancerogenesis, oncogenes, molecular mechanisms

27. THE EFFECTS OF THE SELECTIVE SEROTONIN REUPTAKE INHIBITOR FLUOXETINE IN SOMATIC AND VISCERAL NOCICEPTION IN MICE

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Introduction: Experimental research on fluoxetine potent antinociceptive effects and its interactions with various opioid and adrenergic receptor derivatives, in cutaneous and visceral pain models were investigated.

Material and method: The experiment was carried out, with white mice (20-25g), divided into 7 groups of 7 animals each, treated orally with the same volume of solution, for 7 days, as follows: Group I: distilled water 0,3ml (DW); Group II (M): metamizole 10mg/kbw; Group III (FLX-10): fluoxetine 10mg/kbw; Group IV (FLX-30): fluoxetine 30mg/kbw; Group V (FLX+ATN): fluoxetine 30mg/kbw+atenolol 1mg/kbw; Group VI (FLX+TLZ): fluoxetine 30mg/kbw+tolazolin 1mg/kbw, Group VII (NLX+FLX): naloxone 5mg/kbw+fluoxetine 30mg/kbw. Hot plate was used to assess fluoxetine-induced antinociception. The model of visceral pain consists of writhing test using diluted acetic acid (0,6%). Data were presented as +/- standard deviation and significance was analyzed using SPSS for Windows version 17.0 and ANOVA method. P-values less than 0.05 are considered statistically significant comparing with those of control groups.

Experimental protocol was implemented according to recommendations of the Gr.T. Popa University Committee for Research and Ethical Issues.

Results and conclusions: Oral administration of fluoxetine (10-30mg/kbw) resulted in a significant and dose-dependent antinociceptive effect in writhing test ($p < 0,05$). Atenolol (1mg/kbw) association increased this antinociceptive effect. Fluoxetine (30mg/kbw) also exhibited antinociceptive effect in hot plate assay. Furthermore, tolazoline administration antagonized fluoxetine visceral analgesic effect, 15 minutes after chemical noxious peritoneal irritation. Fluoxetine-induced antinociception was significantly inhibited by naloxone, in the interval between 20 minutes to 25 minutes in writhing test. These data suggest that fluoxetine-induced antinociception involves central opioid, adrenergic and serotonergic pathways.

Keywords: SSRI_s, fluoxetine, antinociception, pain, writhes

28. LAW ASPECTS OF GIVING EMERGENCY MEDICAL CARE BY THE WORKERS OF LAW ENFORCEMENT ORGANS OF UKRAINE

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Introduction: Professional training of the persons of private and command structure the Organs of Internal Affairs (OIA) – is organized, continuous and single-minded process of mastering knowledge, special habits and skills necessary for successful fulfillment operative – official tasks. The professional training of the workers of protection organs includes medical preparing too, which bases on the order of the Ministry of Internal Affairs of Ukraine “Approval of the Regulation on the organization of training ranks and command structure of internal affairs of Ukraine”.

Purpose and Objectives: To establish peculiarity of giving emergency medical care to the workers of law enforcement organs of Ukraine and to look through the subject plan of practical studies of medical preparation for ranks and command structure of OIA.

Material and Methods: It is necessary to analyze some articles of “Basic Law of Ukraine on Health”, to look through “Law on Emergency Medical Care” and other law acts which are regulating the system as giving emergency medical care so, for those, who are in emergency conditions.

Results: Medical training of law enforcement organs includes principles of anatomy and physiology of a man. In fact the workers of law enforcement organs of Ukraine must have improved knowledge of bone-muscular, respiratory and cardiovascular systems because the arrest of these systems is of the reasons of the death during the accidents and other adventures and in such cases the help for the victims must be given immediately. Following the Article 37 of “Basic Law of Ukraine on Health” the first emergency medical care must be given by the workers of militia, fire service, emergency service, drivers and the people of other professions who has this duties assigned by the law and official instructions. Medical training of ranks and command structure OIA in Vinnytsya Region takes place every week on Fridays from the 1st of September to the 15th of May every year. There is a special plan of practical trainings where the specialists hold seminars with the workers of militia service and then they confirm their knowledge during their practice on the clummers. The attention of the workers of the right protection organs is attracted to giving helping to the patients who have injuries and fractures because they provoke massive bleeding, as a rule.

Conclusion: Active actions for supporting the life of a sick man is finished in such a care when the condition of the person is as an irreversible death, as you can read it in the Article 52 “Basic Law of Ukraine on Health”.

Key words: emergency medical care, law enforcement organs

29. THE OPTIMIZATION OF THE COMPLEX TREATMENT IN IMMUNODIFICIENCY STATES

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Introduction: The immune system of the body that supports life systems represents the most significant function in the body protection against various foreign substances (bacteria, viruses, fungi, protozoa, allergens, a modified cell components of transplanted organs and tissues). The most common type of immune system disorders is immunodeficiency – that is subdivided into primary (hereditary, genetic) and secondary ones (acquired). In the immunodeficiency correction are used the immunomodulators. A large number of drugs and groups of immunotropic agents groups caused a variety of approaches and principles of systematization of these drugs, but according their criterion the impact on the certain parts of immunity has been observed. In the last years, the special interest has their analogs that were derived from insects, which can exhibit antiviral, antifungal, antitumor and immunomodulatory effects.

The purpose of the study: The study of immunotropic properties of entomological drug like imupurin, the action definition point and application.

Materials and Methods: In vitro and in vivo experiments the effect of imupurin nonspecific resistance, phagocytosis, the content of B - lymphocytes, T- lymphocytes and their subpopulations according to the guidelines there were studied. Nonspecific resistance was evaluated according to the study drug effect of 100 and 1000 mg per animal, on the survival mice after lethal dose of (1DCL) Staphylococcus aureus. Imupurin influence on the phagocytic activity of neutrophils and macrophages that were evaluated by the number of phagocytic neutrophils and macrophages, the number of phagocytose staphylococcus, phagocytic indexes and phagocytic types.

Results and discussion: In the study of nonspecific resistance was determined that when in mice was administrated lethal dose of S. aureus in the control group, the death of 100 % of the animals they were registered, while preliminary introduction of imupurin at 100 and 1000 mcg improved the survival. In vivo experiments on mice imupurin influence study on phagocytosis activity of neutrophils and macrophages. The obtained study have demonstrated that imupurin in both doses increase in 3-3.5 times of phagocytic number and decreases respectively the nonphagocytic number of neutrophils and macrophages, as well as a number of staphylococcus phagocytosed to neutrophils and macrophages. The study in the reaction of imupurin immunotropic action on the B and T lymphocytes determined the reduction of lymphocytes percentage in T - entomological drug with weak manifestation in immunodepressive actions regarding to the content of T-lymphocytes and immunomodulatory against B lymphocytes confirmed by modulation index.

Conclusions: (1) Entomological drug imupurin shows immunotropic properties that lead to the increase nonspecific resistance, the phagocytic activity of macrophages and neutrophils and phagocytic index. (2) Imupurin has immunomodulatory effects on cellular and humoral immunity and functional activity of neutrophils.

Keywords: Entomology, imupurin

30. CLINICAL AND PHARMACOLOGICAL CHARACTERISTIC OF THE DRUGS USED IN THE TREATMENT OF ERECTILE DYSFUNCTION

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Introduction: ED is a multifactorial pathology, associated with several pathologies like diabetes, metabolic syndrome, lifestyle, leading with rejuvenation of this pathology. Socio-economic impact of this disease is very high.

Worldwide, it is estimated, in 2005 a prevalence of 411 million men with erectile dysfunction, aged between 40 and 69 years. Being a sensitive issue, and often neglected, we are facing with late addressing and, consequently, modest therapeutic options. In the case of young people with early signs of ED, you need to seek for associated pathologies, which can be very different with a more severe impact in patient's life.

The purpose of the work: Study of the incidence of erectile dysfunction among young subjects that are considered healthy.

Methods: 36 subjects, considered healthy, aged between 20 and 30 years were questioned, confidentially, using questionnaire IIEF. The questionnaire consisting of 15 standardized questions, with maximum 5 points for each question. The questions 1,2,3,4,5,15 – evaluate the Erectile function / 6,7 - Sexual satisfaction / 9, 10 - evaluate the orgasmic function/ The questions: 11, 12; evaluate The sexual desire./ The questions 13, 14; evaluate The general satisfaction

Results: Following the analysis of the questionnaires, we obtained the following data; Erectile function disorders - 13%/ Disturbed sexual satisfaction - 33%/ Orgasmic function disorders - 16%/ Disturbance of libido - 11% / Disturbance of the general satisfaction - 5%.

The obtained data can not be generalized because of the small number of surveyed subjects.

Conclusion: According to IIEF test, I highlighted the changes in sexual function in young subjects who consider themselves healthy, and do not give importance to early warning signals. This requires concern from the medical sphere and society. The issue of sexual function is a taboo, less discussed and investigated late, which is why a new medical approach and the awareness of our society on the issue is required.

Keywords: Erectile dysfunction, IIEF

31. ASPECTS OF VERTEBROGENIC PAIN SYNDROME

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Introduction: Back pain is a widespread problem, affecting a large part of the population. About 70% of the population suffers from recurrent back pain and about 15% of population of permanent form. The risk of recurrent back pain is very high (70-80%). 5 % of patients develop chronic back pain which lasts more than three months.

Purpose and Objectives: Management evaluation of drug treatment in severe vertebrogenic pain syndrome through argumentation of administration of drugs with analgesic properties in medical practice in the country.

Results: I conducted a retrospective study analyzing indication sheets of 58 patients diagnosed with vertebrogenic pain syndrome hospitalized in the Medical Department of the Ministry of Internal Affairs, during the period 2013-2014. Of the 58 patients aged 17-66 years, diagnosed with vertebral pathology with persistent, violent and chronic algic syndrome, 32 were men (55,17 %) and 26 (44,83 %) women. In most patients, examined according to indication sheets, the most frequently localization of pathologies with algic syndrome was in the lumbar region constituting 41 patients (70.68%), the neck -11 patients (18.96%) and rarely found in the chest- six patients (10%). According to the obtained results was determined that, in rural areas, vertebrogene pathologies predominated in men (41,37%) and in woman (18,9%); while in urban area results are reversed: women -25% and men -13.7%.

Of the 58 patients analyzed, 20 were treated conservatively and 38 underwent surgery. I concluded that patients receiving conservative treatment most frequently were treated with the following drugs: tolperisone (midocalm) 16 patients, diazepam 13, clodifen 11 patients, 7 gabapentin, diclofenac 6 patients. The mentioned drugs have been prescribed for more than 7-10 days.

Conclusion: - vertebrogenic pain syndrome incidence in urban area increases essentially among women and in rural areas vertebrogenic pathologies are more common among men.

- Basic treatment of pain syndrome represent not only drugs with analgesic effect, also are used central muscle relaxants, tranquilizers and non-steroidal anti-inflammatory drugs.

The treatment corresponds to national clinical protocol.

Keywords: Back pain, herniated disc, analgesics

32. BIOMARKERS FOR DIAGNOSIS OF MYOCARDIAL INFARCTION

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Introduction: It is well known that myocardial infarction is a significant cause of death. Annually, several million patients seek care in the emergency department because of chest pain or other symptoms suggesting an acute coronary syndrome (ACS), but only about 10% are subsequently confirmed to have acute myocardial infarction (AMI). Current cardiac marker technologies can detect extremely small amounts of myocardial necrosis (<1.0 g). Blood testing for biomarkers of myocardial injury plays an increasingly important role for the evaluation, diagnosis, and triage of patients with chest pain.

Materials and methods: This study was aimed for comparative analysis of cardiac biomarkers and argumentation of their use for early diagnosis of myocardial infarction. The study included 120 patients, hospitalized in the Intensive Care Unit of Cardiology Clinic, from who's were taken three blood samples for biochemical analysis (within 24 hours after admission, over 10 days (the discharge) and over 2 months).

Results: The research showed that cardiac biomarkers should be measured in all patients who present with chest discomfort consistent with acute coronary syndrome (ACS). Elevations of cardiac enzyme levels should be interpreted in the context of clinical and ECG findings.

Conclusions: Cardiac troponins T and I are the preferred markers for myocardial injury as they have the highest sensitivity and specificity for the diagnosis of acute myocardial infarction. Presence of any cardiac troponin indicates a worse prognosis in patients with coronary artery disease. At the present time it appears undesirable to attempt to use hs-CRP and B-type natriuretic peptide in individual risk stratification.

Keywords: myocardial infarction, cardiac marker, cardiac troponins, prognosis

33. HEART RATE DEPENDENCE AGAINST THE TRAINING LEVEL IN RATS AT THE BACKGROUND OF INSTRUMENTAL FOOD-PROCURING MOVEMENTS

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Introduction: Certain changes evolve as a result of long-term adaptation to physical stress, especially in the cardiovascular system. Short term decrease in heart rate (HR) below its initial level with subsequent recovery was noticed and studied against the training the background of instrumental food-procuring movements in rats. The subsequent study of revealed dependence pattern may suggest opportunities for objective assessment of the training level and/or diagnostics of cardiovascular system state, thus the study of this is topical and promising. The study objective was to investigate the pattern of HR changes in rats over the background of instrumental food-procuring movements in the process of skill formation.

Materials and Methods: A group (n = 6) of Wistar male rats weighing 250-300 g was used in experiments. HR changes were being registered daily using laboratory made phonocardiographic transducer in the process of 30 minutes long training sessions of instrumental food-procuring movements during 12 days.

Discussion results: Instrumental food-procuring movements are accompanied by a validated HR decrease occurring at the moment of food ball capturing with further restoration to the original level in some seconds. The findings give evidence of direct correlation between training level and the HR decrease.

Conclusion: Combined response of the autonomic nervous and motion control systems suggests that reactions revealed are caused by a CNS joint center. Greater levels of HR decrease evolved in the process of skill improvement may contribute to more successful capturing of food balls.

Keywords: heart rate, rat, food-procuring movements

34. GENETIC CONTROL OF HYPERTENSION

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Introduction: Hypertension is a multifactorial, complex and polygenic human disease that causes significant morbidity and mortality worldwide. The World Health Organization suggests that the number of people affected by hypertension will rise to 1.5 billion in 2020, or 29% of the total population by 2025. In adults there is a continuous, incremental risk of cardiovascular disease, stroke and renal disease associated with high blood pressure. Identifying risk factors for this disease is one of the main directions of research initiated by World and European scientific community. Among these, genetic factors have a decisive impact, role of genetic factors ranging from 31% to 68%. Monogenic and polygenic forms of hypertension have been described. Rare monogenic blood pressure syndromes are characterized by a major gene defect, affecting a single pathway ordinarily involving renal electrolyte balance. Thus, there is a pressing need for a greater understanding of the pathophysiological and genetic underpinnings of blood pressure regulation and dysregulation.

Purpose and Objectives: characterization of the genetic factors involved in the production of high blood pressure; classification of the etiopathogenetic factors that predispose to the occurrence of hypertension; characterization of genes involved in the control of hypertension; study the distribution of the polymorphisms II, DD, ID of the ACE gene and GG, TT, GT of the NOS gene in people affected by essential hypertension and non-affected from the population of Republic of Moldova.

Materials and methods: The study has included 30 persons, 15 affected by essential hypertension and 15 non-affected. Methods which have been used are DNA isolation, PCR and electrophoresis of DNA fragments.

Results: The results of the analysis of the ACE genotype frequency in the study group showed an increased frequency of 55% for ID genotype in compared to 25% for II and 20% for DD genotypes. The results of the analysis of the NOS genotype frequency in the study group showed an increased frequency of 72% for GT genotype in healthy individuals, the homozygous genotypes are seen with greater frequency in affected individuals.

Conclusion: There is an association between ACE and NOS gene polymorphisms with hypertension prevalence. DD genotype of ACE gene and TT genotype of NOS gene may be associated with increased risk of hypertension.

Keywords: genetic control, hypertension, ACE, NOS

35. SUICIDE CELLS IN NORMAL AND PATHOLOGICAL

Bejenari Inna

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Introduction: The cells of a multicellular organism are members of a highly organized community. The number of cells in this community is highly regulated — not simply by controlling the rate of cell division, but also by controlling the rate of cell death. If cells are no longer needed, they commit suicide by

activating an intracellular death program. This process is called programmed cell death, or apoptosis (from a Greek word meaning "falling off," as leaves from a tree). Apoptosis is a vital component of various processes including normal cell turnover, proper development and functioning of the immune system, hormone-dependent atrophy, embryonic development and chemical-induced cell death.

The purpose of this review is to provide a general overview of current knowledge on the process of apoptosis, the role of apoptosis in health and disease, as well as a discussion of potential alternative forms of apoptosis.

The mechanisms of apoptosis are highly complex, involving an energy-dependent cascade of molecular events. Recent studies indicate that there are two main apoptotic pathways: the extrinsic and the intrinsic. There is an additional pathway, that involves T-cell mediated cytotoxicity and perforin-granzyme-dependent killing of the cell. The perforin/granzyme pathway can induce apoptosis via either granzyme B or granzyme A. The extrinsic, intrinsic, and granzyme B pathways converge to the same final, or execution pathway. This pathway is initiated by the cleavage of caspase-3 and results in DNA fragmentation, degradation of cytoskeletal and nuclear proteins, cross-linking of proteins, formation of apoptotic bodies, expression of ligands for phagocytic cell receptors and finally uptake by phagocytic cells. Abnormalities in cell death regulation can be a significant component of diseases such as cancer, autoimmune lymphoproliferative syndrome, AIDS, ischemia, and neurodegenerative diseases such as Parkinson's disease, Alzheimer's disease, Huntington's disease, and Amyotrophic Lateral Sclerosis. Some conditions feature insufficient apoptosis whereas others feature excessive apoptosis.

Conclusions: Apoptosis is a highly regulated energy-dependent process. The importance of apoptosis consists in understanding its mechanism, because it is a vital component of health maintenance and disease outbreak. The widespread involvement of apoptosis in the pathophysiology of disease define studying the treatment strategies of that disease. Understanding the mechanisms of apoptosis at the molecular level provides deeper insight into various disease processes and may thus influence therapeutic strategy.

Keywords: Apoptosis, programmed cell death

36. THE ROLE OF THE 3 GENERATIONS OF ANTIHISTAMINES IN TREATING ALLERGIES

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Introduction: Recent statistical data show a constantly increasing incidence of allergic disorders emphasizing the role of the development of new anti-allergic medication in the treatment of different allergies. H1-antihistamines (H1A) represent the class of anti-allergics most used by physicians in handling the immediate-type of hypersensitivity reactions. Currently, there are 3 generations of H1-antihistamines, classified according to their selectivity and sedative properties.

Purpose and Objectives: The study was designed to find the prevalence of H1-antihistamines among other administered anti-allergic drugs and to determine the particularities of their use.

Materials and Methods: We collected data from 53 medical records inscribed in the department of Allergology from Republican Clinical Hospital of Republic of Moldova, in November – December, 2013. There were patients diagnosed with various immediate-type allergic reactions, such as : Quincke's edema, allergic dermatitis, acute and chronic urticaria, drug allergy and Stevens-Johnson syndrome. The information about the antihistamine drugs prescribed, length and route of administration in stationary versus further ambulatory periods was analyzed.

Results: We found that 28 patients out of 53 (52,83%) were prescribed antihistamines stationary and 20 out of 53(37,73%) – ambulatory. The drugs used stationary were: chloropyramine and promethazine – both first (classical) generation H1A, administered in all patients(100%), intravenous, for an average of 7-8 days. The drugs used ambulatory were as following : clemastine

(first generation H1A) – in 1 patient (1,88 %), intravenous for 5 days; bilastine (second generation H1A) – in 8 patients (15,1 %), orally for 1 month; levocetirizine and desloratadine (third generation H1A) – in 11 patients (20,75 %), orally for 1-2 months.

Conclusion: The role of classical H1-antihistamines in clinical practice remains still high. Second and third generations of H1A are more preferred in further ambulatory anti-allergic treatment, partly due to the absence of the sedative effect of the classical H1A, important for people who need increased attention in practicing their professions, and partly due to their prolonged time of action.

Keywords: allergic disorders, anti-allergic medication, third generation H1-antihistamines

37. CHANGES OF BONE LIPID COMPOSITION IN OXIDATIVE STRESS

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Introduction: Composition and bone metabolism is of particular interest due to high incidence of osteoporosis, frequent and serious complications of the disease and increased risk of death after osteoporotic fractures.

The aim of the research: Was to study the bone lipid composition in experimental oxidative stress induced by CCl₄ long term administration.

Materials and method: The study was conducted on a sample of 60 white laboratory rats of both sexes without pedigree. The animals were divided according to their age in 3 groups, each one consisted of 2 subgroups – control and with experimental oxidative stress. The level of total lipids, phospholipids, triglycerides, cholesterol (total, free and esterified) and total antioxidant activity were determined in the bone.

Results: Our studies had revealed ontogenetic and gender dependent changes of the bone lipid content in oxidative stress. In young male rats significantly decreased the amount of phospholipids (11%, $p < 0,001$) and triglycerides (45%, $p < 0,05$), while in female one – the content of phospholipids increased by 8% ($p < 0,05$) and that of cholesterol – decreased by (36%, $p < 0,05$). The oxidative stress did not induce important changes in lipid concentrations in bone of adult animals. An exception is the reduction of phospholipid concentration by 24% ($p < 0,001$) and the increase of the esterified cholesterol level by 39% ($p < 0,01$) in males. Oxidative stress did not induce any changes of the lipid content in bone in old animals. At this developmental stage were influenced only the concentration of total cholesterol (+13%, $p < 0,05$) and phospholipids (-12%, $p < 0,05$) in male rats. In experimental oxidative stress induced by long term CCl₄ intoxication ambiguous changes of total antioxidant activity were found in animals of different age and gender, but in all cases the total antioxidant activity was significantly higher than in the polar compartment compared in all studied groups.

Conclusions: In oxidative stress, regardless of the ontogenetic stage of development, the amount of total lipids did not change conclusively, but the general trend was of decreasing, especially due to the reduction of phospholipids and triglycerides levels and less of cholesterol. Deeper disturbances of the saponifiable lipids content may be a consequence of the intensification of lipid peroxidation in bone, due to the production of free radicals during the carbon tetrachloride metabolism which affect predominantly the unsaturated fatty acids of the bone lipids.

38. PREVALENCE OF SLEEP DISORDERS IN GENERAL PRACTICE AND MORBIDITIES ASSOCIATED WITH IT

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Introduction: Sleep disorders are a common health problem in our society, which unfortunately is usually ignored. The quality and quantity of one's sleep are affected by sleep disorders and many medical conditions, acute or chronic, causing daytime fatigue and working

ability impairment. Several epidemiological studies estimate the prevalence of insomnia in the general population from different countries ranging from 13,4% to 48%. According to a German study, the prevalence of sleep disorders in general practice is assessed at 58,5%; within the group of severely insomniac patients 35% were males and 65% females.

Purpose and objectives: Since in our country this has to be the first epidemiological study it has to outline the sleep characteristics, prevalence of sleep problems in general practice, the dependence on gender and age and association with various medical conditions.

Materials and methods: This study is based on questionnaires filled in by general practice physicians in 2 cities from Moldova (Bălți and Chișinău) during a week. There were interrogated 1967 patients, among which 67,9% were female and 32,1% male.

Results: The incidence of sleep disorders among patients that consulted a general practitioner are rated to 86,43%. The most common affected age is over 60 years- 29,5%; followed by the range of ages between 50 and 60 years-29,0%; 40-50 years-14,9%; 30-40 years-7,0%; 20-30 years-4,7%; 15-20 years-1,2% and <15 years-0,2%. It seems that women are more likely to suffer from sleep disorders than men: 68,45% of patients with sleep issues are females and 31,55% are males. The most common sleep disorder is the difficulty in falling asleep-23,9% cases, followed by intermittent sleeping in 19,8%, the same amount of patients related association of initial insomnia, intermittent sleeping and early awakening. 10,6% of patients with sleep disorders deal with early awakening; 6,2% have an early insomnia and intermittent sleeping, 3,6% associate the sleep onset insomnia with early awakening and 3,2 % of them complained of intermittent sleeping and early awakening. In 1698 cases there are noted connections with other morbidities. Thus, the most common medical conditions linked with sleeping disturbances are cardiovascular diseases- 23,4% followed by neurological disorders- 15,9%, respiratory system diseases- 3,7%, endocrine disorders 3,5% and other diseases -12,4%.

Conclusion: The high prevalence of sleep disorders in our population and the association with several morbidities underscore the importance of sleep problems, as indicators of health status.

Keywords: Sleep disorders, general practice, comorbidities

39. GREATER AND LESSER OMENTUM. CLINICAL SIGNIFICANCE

Cebotaru Aurelia

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Introduction: The first publications about using of the great omentum date back to the 19th century. The functions of these abdominal organs were studied experimentally and it was shown that in pathological conditions great omentum has such functions as: plasticity, hemostasis, revascularization, absorbing pathological fluid from the abdominal cavity, immunological reactivity. Free transposition of large omentum may be the only solution in difficult cases with severe bone or joint infections, and can save the patient from limb amputation. If the most tissues and systems have been studied for their structure and functions the greater and lesser omentum remain a question mark permanently. From "forgotten organ" to the most valuable autograft.

Purpose: The purpose of this study is to analyze and to structure information which is attributable to the medical significance of greater and lesser omentum.

Results: In thoracic surgery the greater omentum is widely used for filling cavities in empyema, pleural effusion, chest wall reconstruction after extensive resection, strengthening bronchus after surgical interventions, prevents dehiscence bronchial sutures in lung transplantation. The great omentum is mobile and has a large surface area which allows coverage of irregularly shaped defects, has antimicrobial properties, vascular rich lipid angiogenic factor, participates in the development of vessels, helps regeneration due to its high containing fibroblasts, covering functional and cosmetic defects. Free transposition of large omentum is also used in the reconstruction of soft tissue defects secondary open fractures of the leg. In this case omentoplastics is useful for covering large defects, the vessels are anastomosed to the recipient area. Unique characteristics of the omentum, including vascularization,

flexibility, availability of surface and ability to fight infections transmitted by lymphatics are to be considered the main tissue used to heal open wounds of thorax as well as from the upper and lower limbs. Most patients tolerate positively the transposition of omentum, with a lower mortality rate. Greater omentum is widely used in abdominal surgery as adjuvant material. The great omentum is used in neurosurgery because epiploic tissue possess marked capacities of revascularizations. Through the newly formed vessels is ensured oxygen supply, epiploic neurotransmitters and neurotrophic factors to ischemic tissues. In Alzheimer's disease after transplantation of epiploic tissues the optic chiasm, the carotid bifurcation and the anterior perforated substance are as cases of improvement of the clinical symptoms.

Conclusion: Greater omentum is a complex structure, with a support of embryonic tissue that can dress look any histological class we want. Vascularization to any class type specialties, can quickly adapt to any need, is keeping with this ability permanently. Due to plasticity and capacity of transformation matrix considers to be ideal for other tissues or autografts.

Keywords: great omentum, properties, autograft

40. ANTIARRHYTHMIC DRUGS AND THEIR ACTION ON ION CHANNELS

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Introduction: Antiarrhythmic drugs are preparations used in the treatment of cardiac arrhythmias. Arrhythmias are found in 95% of cases of myocardial infarction within 48 hours, and many people, including young people die from ventricular fibrillation, but not from myocardial infarction, which is usually very small.

According to Vaughan-Williams antiarrhythmics are divided into 4 classes:

1. **Class I** agents interfere with the sodium (Na^+) channel.
2. **Class II** agents are anti-sympathetic nervous system agents. Most agents in this class are beta blockers.
3. **Class III** agents affect potassium (K^+) efflux.
4. **Class IV** agents affect calcium channels and the AV node.

The purpose of the work: To make a schema that will be described mechanism of action and effects of drugs on ion channels

Methods: Literature study about antiarrhythmic drugs and their action on ion channels

Results: The class I antiarrhythmic agents interfere with the sodium channel. Class I agents are grouped by what effect they have on the Na^+ channel, and what effect they have on cardiac action potentials. Class I agents are divided into three groups (Ia, Ib and Ic) based upon their effect on the length of the action potential. Class III agents predominantly block the potassium channels, thereby prolonging repolarization. Inhibiting potassium channels, slowing repolarization, results in slowed atrial-ventricular myocyte repolarization. Class IV agents are slow calcium channel blockers. They decrease conduction through the AV node, and shorten phase two (the plateau) of the cardiac action potential. Class II was not described, because they have no action on ion channels.

Conclusion: Knowing classes of antiarrhythmic drugs, and their action on ion channels, we will be able to choose appropriate preparation with antiarrhythmic action, according to the patient's pathology.

Keywords: antiarrhythmic drugs, ion channels

41. REM SLEEP AND MEMORY. MEMORY DISORDERS IN SLEEP PATHOLOGY

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Introduction: REM sleep has a great influence on the development of memory, due to intense brain activity and to metabolism which can be increased up to 20%. Special sequences of declarative memory are reorganized during sleep, being reflected by changes of activity in brain during the subsequent consolidation of memory.

Propose and Objectives: To highlight the importance of sleep on memory and to mention the memory disorders that include sleep pathology.

Results: One of the theories of REM sleep and memory (described by Roffwarg, Musio and Dement in 1966) suggests that repetitive neuronal activity during REM sleep of the fetuses is associated with the development and their growth; the same synaptic reorganization continues in adults during REM sleep, so the information is recalled due to repetitive use of it in the circuit that stores the information. Cholinomimetic drugs (with an action similar to acetylcholine) increase the frequency of the REM sleep episodes. Therefore it was assumed that large neurons that secrete acetylcholine, located in the upper brainstem, could activate multiple brain areas. Theoretically this could be the cause of the hyperactivity met in different brain regions during REM sleep. The mechanism that allows memory consolidation through neural activity can be found in the hippocampus, a well-established brain region to memory. In this region, during REM sleep, are observed EEG theta waves that help to transfer the information to the neocortex. Have been observed that the sleep pathology as apnea, insomnia, generates memory disorders, it forms an imbalance in the duration of the REM sleep and its quality.

Conclusion: The relationship between reverberation brain and memory consolidation still remains unclear, just some aspects of this link were studied till now. Due to the fact that neuronal reactivation during REM sleep was proved and it is sustained for long period of time, providing a mechanism for increasing the memory until it is stored effectively, it is to be asserted the importance of this process that allows the brain to process the new information during the day.

Keywords: REM sleep, memory, sleep pathology

42. VARIABILITY OF THE EXTRACRANIAL BRANCHES OF THE FACIAL NERVE (MORPHOCLINICAL ASPECTS)

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Introduction: Numerical and trajectory variability of facial nerve branches is one of the main causes of failed surgery, which determine neurologists and surgeons to perform systematic studies of variants of branching path and extracranial portion of the facial nerve.

Purpose and Objectives: To study the variability of the extracranial facial nerve branches and create morphological path way maps of facial nerve.

Material and methods: The variants of branching of the extracranial part of the facial nerve were studied in 12 anatomical parts.

Results: The facial nerve variants branching of two primary trunks and cervicofacial temporofacial was predominant in 10 cases out of 12 studied cases, nerve trifurcation was observed only in one case, as evidenced by the case of the nerve branch fan-shaped. The length of the predominant average criteria was in eight cases, followed by three short length and long-term cases in a single case. In five cases the nerve trunk had an upward trajectory, in four cases the trajectory was downward and in three cases there was a horizontal trajectory. In eight cases predominate thick upper torso (temporofacial), in three cases by thick trunks were equal and only in one case the

thickness of the lower torso prevailed over the upper torso. The anatomical parts were made on cadaveric material belonging to the same person, in one case we noticed the obvious difference in how right branching nerve is located on the left side of the face, and in the second case differences were not very pronounced. The results show that the distance between the primary trunks between 10 and 70°, the extent of the upper torso (temporofacial) is between 30 and 130°, the extent of the lower torso is between 25 and 70°, the angles of the branches of the upper torso are between 10° and 70°, lower torso angles between branches vary between 20 and 40°.

Conclusions: (1) The variability of the extracranial portion of the facial nerve branches falls into a wide range of options. (2) Predominant after branching options -fork in primary trunks and cervicofacial temporofacial after long-stem of medium length, as thick - temporofacial trunk are after Ferry - upward. (3) According to surgical anatomical maps, distances between primary trunks between 10 and 70°, the extent of the upper torso (temporofacial) is between 30 and 130°, the extent of the lower torso is between 25 and 70°, the angles of the branches of the upper torso are between 10° and 70°, the angles of the lower trunk branches vary between 20 and 40°.

43. ANGIOGENESIS OF ATHEROSCLEROTIC PLAQUES IN PATIENTS WITH METABOLIC SYNDROME

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Introduction: Numerous studies have demonstrated that endothelial damage is a precursory symptom of atherosclerosis, which leads to an increase of vascular permeability, activation of mast cells and migration of leukocytes, lymphocytes, macrophages, adhesion of platelets, proliferation of vascular smooth muscle cells and eventual vasospasm and pro-inflammatory condition. All of the above listed components can be rightfully considered active pathogenetic participants in atherosclerosis and a result of aggregation of all risk factors that accompany a wide variety of cardiovascular diseases, such as coronary heart disease, hypertension, diabetes, dyslipidemia, etc. The influx of monocytes and mast cells during the early stages of atherosclerosis leads to the most pronounced manifestations of vascular inflammation, especially in patients with metabolic disorders. Angiogenesis is a very important pathogenetic element of atherosclerosis in stages of complicated plaques, along with mast cells and macrophages.

CD-105 is a sensitive marker of newly formed endothelial cells, an effective index of activation and proliferation of microvessels, not only in aggressive forms of cancer, but also in atherosclerotic plaques of the affected vessels. The plaque neovascularization process often begins in intima, progresses and leads to further destabilization of atherosclerotic plaques (intramural hemorrhage, ruptures etc.). Also, anti-MCT (mast cell tryptase) and CD-68 demonstrate clearly the important pathogenetic stages and patterns of atherosclerosis development and its complications in patients with metabolic disorders.

Purpose and Objectives: In our study, we analyzed the histotopographic distribution of newly formed blood vessels as a feature of angiogenesis, the extent of mast cell degranulation, the expression of macrophages in different types of plaques, as well as various arterial vessels in patients with atherosclerosis and metabolic syndrome, complicated by atherosclerosis. We have tried to analyze the importance of mast cells and macrophages, the patterns of development of atherosclerosis stages, along with diagnostic and prognostic features.

Materials and Methods: The study included 34 patients, who died of atherosclerosis (no. =17) and atherosclerotic complications of metabolic syndrome (no. =17). Fragments of their cerebral (middle cerebral arteries), carotid, coronary arteries, aorta (thoracic and abdominal segments), renal, iliac and vertebral arteries were collected for research at autopsy. The fragments

were processed using standard techniques. The type definition of plaques was based on morphological classification, as well as on macroscopic and histological images of hematoxylin-eosin stained sections and on histochemical methods – silver and orcein impregnation. To determine the expression of mast cells in the affected vessels, we have used anti-MCT immunohistochemical stain. Macrophages were identified using the CD-68 specific marker and the newly formed vessels – respectively, by using CD-105 (Endoglin), which is specific.

Results and conclusion: The evaluation of the results was based on determining the density and intensity of the final reaction, reflected in the quantitative ratio of different zones of atheromatous plaques. Positively stained mast cells, macrophages and newly formed vessels were found in many types of atherosclerotic plaques, especially in adventitia and in the immediate vicinity of plaques and in subendothelial layers.

We found a statistical correlation between the plaque type and clinical data.

The immunohistochemical method is effective for determining mast cells, macrophages, and newly formed vessels of atherosclerotic plaques, directly reflecting many important pathogenetic elements of atherogenesis in patients with metabolic syndrome.

CD-105 is a valuable marker of angiogenesis of atherosclerotic plaques, intimal arteries and adventitial vessels, an indicator of the degree of variation in the pathological development of atherosclerosis - the factors that may be important in introducing modern methods of research, diagnosis, treatment and prognosis of these diseases.

Keywords: Atherosclerosis, metabolic syndrome, angiogenesis, mast cell, macrophage, stability of atherosclerotic plaque, acute cardiovascular syndromes

44. CLINICAL AND GENETIC STUDY OF NEURODEGENERATIVE DISEASES

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Introduction: Huntington's disease (HD) is a neurodegenerative genetic disorder that affects muscle coordination and leads to cognitive decline and psychiatric problems. It typically becomes noticeable in mid-adult life. HD is the most common genetic cause of abnormal involuntary writhing movements called chorea, which is why the disease used to be called Huntington's chorea.

The purpose: The study of clinical, molecular and genetic aspects of Huntington's disease.

The objectives: (1) Evaluation of the molecular mechanisms involved in the pathogenesis of Huntington's disease. (2) Studying the phenomenon of penetrance and anticipation in Huntington's disease. (3) Determining the clinical and laboratory features of Huntington's chorea and differential diagnosis with other diseases neurodegenerative. (4) Evaluation of the possibilities of genetic testing and genetic counseling in families with Huntington's disease.

Materials and methods: There were analyzed clinical data and genetic aspects of 10 patients (5 men, 5 women) diagnosed with chorea Huntington, hospitalized in IMSP Institutul de Neurologie și Neurochirurgie in 2006 – 2012 period. The patients that were diagnosed with other neurodegenerative diseases were excluded from the study. Used methods: anamnesis; genealogical tree; neurological examination; laboratory tests (CT, MRI, Ecoencefalografie).

Results: Genetic study was partially achieved. Can be confirmed autosomal dominant inheritance in three families; noncomplete penetrance and anticipation in 2 families.

Conclusion: Trinucleotide expansion causes: onset of disease, evolution of the disease, severity of symptoms. Huntington disease is transmitted autosomal dominant: each affected person has a carrier of mutation that is symptomatic or asymptomatic, penetration of gene is dependent on the number of trinucleotide repeats, gene instability causes anticipation phenomenon. Molecular diagnosis can be useful for confirming a diagnosis, assessing prognosis and for presymptomatic diagnosis.

Keywords: chorea, anticipation, penetrance, genetic counseling

45. TRIGGER POINTS. MORPHOFUNCTIONAL FEATURES APPLICATIVE IMPORTANCE

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Introduction: Myofascial pain syndrome (MPS) is a form of myalgia that is characterized by local regions of muscle hardness that are tender and that cause pain to be felt at a distance, referred pain. The central component of the syndrome is the trigger point (TP) that is composed of a tender, taut band. Stimulation of the band, either mechanically or with activity, can produce pain. MPSs can mimic or cause many common conditions such as chronic daily headache and pelvic pain because of the pain referral patterns of TPs. The MPS is not a fatal condition, but it can cause significant reduction in quality of life.

Purpose and Objectives: The theoretical research of the concept of Trigger Point and determination applicative importance by analyzing epidemiological indicators of TP among the population from Chisinau.

Materials and methods: This study group is consisting of 100 patients what has visited Family Medical Center N.1 from Chisinau during the period 17.03.2014 – 25.03.2014.

The selection criteria are:

- The presence of muscle pain (at least three visits to the doctor during the last year).
- The age and gender (50 men (25>40 years, 25<40 years), 50 women (25>40 years, 25 <40 years)).

In this study have been used two models of questionnaires for observing and analysis of the each participant characteristics.

Result: Amongst 100 patients with musculoskeletal pains 70% of participants have been detected the PT presence.

Minimum age of study participants was 20 years and maximum 69 years by an average 40 years (± 2 years). This fact gives a greater current problem because only this group represents mainly yield of the labor force.

Thus from 70 participants diagnosed with MPS, 39 (55.7%) represents female patients.

The muscles with maximum incidence of TP location are: *m.trapezius* – 69%, *m.romboideus* – 37%, *m.brachioradialis* – 24%, *m.quadratus lumborum* – 53%, *m.vastus* – 23%, *m.gastrocnemii* – 38%. The participants group in the study presents a TPs topography contrast by gender. MPS generates chronic pains by low intensity.

Participants in this study indicated on visual analogue scale an intensity of their pains to a minimum of 3 points and maximum of 8 points average value in the study group is 4.7 points.

Conclusion: Analysis of epidemiological evidence of TPs among the population from Chisinau outlined a high incidence of these (70%). TP has a higher prevalence at women (55.7%) and the increased incidence at average age (40 years: ± 2 years).

From topographical point of view, TP has a higher incidence in *m.trapezius* – 69%.

SDM affect quality of life and economy of the country by increasing absent days from work and increased costs for health insurance.

Keywords: Trigger points, Myofascial Pain Syndrome, *m.trapezius*

INTERNAL MEDICINE SECTION

1. NEW PERSPECTIVES IN TREATMENT OF CHRONIC ALCOHOLIC HEPATITIS

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Background: The thiopoetin (Glutoxim) regulates the intracellular thiol exchange. It's cytoprotective action is determined by the new level of redox systems and the dynamics of phosphorylation of key proteins of the signal-transmitting systems and transcriptional factors (NFkB and AP-1).

Aims: to evaluate the effectiveness of Glutoxim in the complex treatment of chronic alcoholic hepatitis (CAH).

Methods: the study involved 90 patients with CAH. They were divided into 2 groups (45 persons in each group). The patients of study group received Sylimarol (Herbapol Poznan) 35 mg 2 tablets 3 times daily after meals, and Glutoxim (Pharma VAM) 30 mg i/v once per day, during 10 days. The patients of control group received only Sylimarol in the same dosage. The efficacy of treatment was assessed by measuring liver function tests by common methods (Alt, AsT, common bilirubin level (CBL)) before and after treatment. Content of the reduced glutathione (RH) in patient's blood was determined by method of I. Meschyshen and I. Petrova.

Studies were performed in compliance with the Declaration of Helsinki and recommendations of the Committee on Bioethics at the Presidium of Academy of Medical Sciences of Ukraine.

Results: After 10 days of treatment patients of study group it was observed a statistically verified decreasing of CBL – from $64,57 \pm 5,176$ to $34,67 \pm 5,178$ $\mu\text{mol/l}$ ($p < 0,05$), but in control group it decreased only to $52,28 \pm 5,172$ $\mu\text{mol/l}$ ($p < 0,05$). The AsT activity in the study group reduced from $1,43 \pm 0,035$ to $0,63 \pm 0,031$ mmol/h^*1 , the ALT activity reduced from $1,02 \pm 0,057$ to $0,65 \pm 0,053$ mmol/h^*1 (while in control group these data reduced only to $0,94 \pm 0,055$ mmol/h^*1 and to $1,13 \pm 0,036$ mmol/h^*1 correspondently ($p < 0,05$)). The RH level in the study group increased after treatment from $0,58 \pm 0,007$ to $0,76 \pm 0,007$ $\mu\text{mol/l}$ ($p < 0,05$), while in control group it have not changed significantly.

Conclusions: The analysis of the data showed high therapeutic efficiency of Glutoxim in the complex treatment of CAH through its repairing action on glutathione redox system, that opens up new prospects for conservative treatment of this disease.

2. AN INSIGHT INTO THE SPECTRUM OF APERT SYNDROME – A CASE STUDY AND ITS MANAGEMENT

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Introduction: Apert's syndrome (Acrocephalo-syndactyly) is an infrequent congenital, autosomal dominant condition, occurring in about 1 in every 100000 to 160000 live births, characterized by primary craniosynostosis, mid face hypoplasia and symmetrical syndactyly of the hand and feet, often in an association with other organ's anomalies.

Aim of the study: The purpose of this report is to present Apert syndrome patient by highlighting craniofacial characteristics and its management.

Materials and Methods: The purpose of this paper is to report a case of Apert syndrome with brachycephalism, syndactyly and hypodevelopment of the middle of the face in a three-month-old female child, admitted to the Public Medical Sanitary Institution Scientific Research Institute of Mother and Child Health Care.

Results and Discussion: The final diagnosis of Apert syndrome (acrocephalosyndactyly) was made on the basis of typical craniofacial features after considering some other similar syndromes. Also were excluded associated malformations of other systems that facilitate an accurate diagnosis of syndrome.

Development of the craniofacial surgery allows to children with Apert syndrome to achieve a full potential by giving them a possibility for a social acceptance and tolerance. Early neurosurgical treatment doesn't prevent mental retardation. However, at each developmental level children are put in the position of an emotional and social adaptation, due to their mental retardation and their appearance. Families and doctors play an important role in helping these children to overcome their problems and also the social unacceptability.

Conclusions: This case demonstrates the general characteristic of a patient with Apert syndrome. Its management must be multidisciplinary and needs the consultation of different specialists. Evolution depends at severity of brain malformation. Also upper airway compromise due to a combination of a small size of the nasopharyngs and reduction in the patency of the choanae as well as lower airway compromise due to anomalies of the tracheal cartilage may be responsible for early death. Even in its full clinical manifestations, Apert syndrome is still easily recognizable, but its several manifestations are so peculiar that they constitute a fundamental base of the diagnosis.

Keywords: Apert syndrome, clinical manifestations, management

3. THE ROLE OF CARDIOVASCULAR RISK FACTORS IN PATIENTS WITH RHEUMATIC HEART DISEASES

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Introduction: Rheumatic heart diseases lead to chronic heart failure and reduced quality of life in many patients. Ischemic heart disease represents the major role in the structure of morbidity and mortality worldwide. Traditional risk factors for vascular disease are important in, but do not fully account for, the increased risk of ischemic heart disease in population.

Purpose and Objectives: To evaluate cardiovascular risk factors and appreciate the risk of cardiovascular death in patients with rheumatic heart diseases.

Materials and Methods: We examined a sample of 65 patients with rheumatic heart diseases according to the diagnostic criteria. We applied the SCORE scale and divided the sample into two groups. The first one with SCORE < 5% (30 patients) and the second one with SCORE ≥ 5% (35 patients). We assessed traditional and novel risk factors of cardiovascular diseases by clinical and laboratory methods, and made a comparative analysis of modern risk factors.

Results: The study group included 26 men (40%) and 39 women (60%) with mean age 59.5 ± 0.03. In the study group predominated mitral valvulopathy in 46 (70.7%) patients vs. 19 (29.2%) patients with aortal one. From the traditional risk factors the most significant ones for the increased cardiovascular risk were outlined by hypertension in 22 (62.9%) cases, followed by dyslipidemia – 19 (54.3%) cases and obesity – 10 (28.6%) cases. From modern risk factors a major role had the left ventricular hypertrophy assessed on ECG which was found mainly in patients with SCORE ≥ 5% – 10 (28.6%) patients vs. 6 (20%) patients with SCORE < 5%. Also, the patients with SCORE ≥ 5% had a higher prevalence of other modern risk factors, such as: metabolic syndrome, a high CRP level, a low glomerular filtration rate, and a high level of anxiety determined by using Spilbenger test. On the other hand, the patients with SCORE < 5% were appreciated mainly with concentric hypertrophy, in 7 (23.3%) cases vs 5 (14.3%) cases in patients with SCORE ≥ 5%. Therefore, the concentric hypertrophy is considered being a negative factor for the cardiovascular events.

Conclusion: Patients with rheumatic heart diseases have an increased cardiovascular risk, influenced not only by traditional risk factors, but also by the modern ones.

Keywords: Rheumatic heart diseases, risk factors

4. IMPACT OF CARDIO-VASCULAR COMPLICATIONS ON PREDICTING OF THE THROMBOEMBOLIC EVENTS AND PROGNOSIS OF INFECTIVE ENDOCARDITIS OUTCOME

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Introduction: The infective endocarditis (IE) is a serious immune-inflammatory disease characterized by vegetative damage of cordis and causing serious complications. The average annual sick rate is 3-10 cases for 100 000 of population, and mortality is 16-20%.

Aim: To study the cardiovascular complications in patients with infective endocarditis and their impact on the evolution and prognosis of the disease.

Materials and methods: The study included 132 patients: 128 – hospitalized in the Cardiology Department Nb. 4 of the Cardiological Institute, and 4 patients from the Municipal Hospital "Holy Trinity". The average age of enrolled patients was 39.94 ± 2.1 years. The diagnosis was established according to the DUKE diagnostic criteria for IE.

Results: The most common complication in patients with IE is cardiovascular insufficiency (CI), which was reported in 100% of investigated patients. Analyzing the results, we noted that in 48.7% of the patients from the study was developed CI III NYHA functional class (FC), followed by the CI II FC degree in 43% of cases. CI IV and IFC were diagnosed in only 6% and 2.3%, respectively. FC of CI in patients with IE increasing dependence of endocardial involvement in the disease process and valvular damage, detection of the vegetation cusp and chordae rupture, annular abscess at EcoCG. The most frequently involved in the disease process were aortic and mitral valve in 53.5% and 41.5% of cases, respectively. It was proved echocardiographically the endocardium damage in 72.6% of cases: vegetations (64%), the decompensation of prosthetic valve (25%), breakage of cords (18%), myocardium apostasis (3.79%). The positive hemoculture was found in the 41.5% of cases, mostly staphylococcus (44%) and streptococcus (38%). In 20% of cases there were diagnosed embolisms. Due to predicting of thromboembolic complications using special formulas in our patients the result was 7%. The forecast of the outcome was favorable in 74% patients, relatively favorable and unfavorable was observed in 17% and 9%, respectively.

Conclusions: The IE course severity is determined by several criteria: "masked" clinical picture, delayed diagnosis, high frequency of complications and the problems of the early detection of them, as well as the complexity of selection of an efficient treatment. High CD FC by NYNA, embolisms and high percentage of negative hemocultures were the predictors of lethal outcome.

Keywords: Endocarditis, vegetations, prognosis

5. AORTIC DISSECTION

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Introduction: Aortic dissection is a relatively rare pathology, but it is a major surgical medical emergency, having a potential disastrous with a high rate of mortality. Dissection of the aorta represents the separation of the aortic wall at the medium level caused by the force of blood flow that enters through a defect in the intima level with the formation of a false lumen, which can extend over a variable length of the vessel. This leads to malperfusion of the vital organs and in the absence of an adequate treatment to the death.

Objectives: Studying the pathophysiology of the development mechanism and evolution of the Aortic dissection process. Highlighting the diagnostic methods with the highest specificity in a short time. Retrospective of clinical assessment of patients with AD from the Republic of Moldova

in order to determine the most common cause in triggering Aortic dissection, elapsed time between onset - diagnosis and treatment and its influence on the subsequent evolution of the pathology.

Material and Methods: Retrospective of clinical study of the medical records of patients in SCR and IMSPIC during the 2013-2014 years.

Results: The most common mechanisms involved in the production of Aortic Dissection or demonstrated to be the primary defect of the intima of atherosclerotic plaque, ulcers or other causes less understood, vasa vasorum rupture with the blood penetration between intima and media, connective tissue diseases such as Marfan and Ehler-Danlos syndromes. IVUS and MRI were proved as diagnostic methods with the highest specificity and sensitivity in the early diagnosis of Aortic Dissection, followed by biplane and multiplane transesophageal echocardiography. The incident of the AD in the Republic of Moldova is 6 cases per 100,000 population, the prevalence is 180-200 new cases per year. Of all performed autopsies, AD is detected in 1-3 % of cases. Mortality of untreated patients in the first 48h is 1-2% per hour. Most commonly DA is associated to Marfan syndrome, atherosclerotic plaques with uncontrolled hypertension and is found mainly at males in 5-6 decade of life.

Conclusions: Aortic Dissection is a major emergency pathology, it develops to the people with premorbid background aggravated cardiovascular and on background of connective tissue pathologies. Requires special technical equipment for diagnosis and a quickly treatment.

Keywords: Aortic dissection, emergency, evaluation

6. UNSTABLE ANGINA – CLINICAL PARTICULARITIES AND EVOLUTION

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Introduction: Unstable Angina (UA) is a major health problem that causes a large number of hospitalizations from us and around the world.

Objectives: Assessment of risk factors, clinical features and evolution in unstable angina.

Materials and methods: The study was made in the period of November 2012 – October 2013 and included 210 patients with the diagnostic of unstable angina pectoris based on the clinical, electrocardiographic and echocardiographic evaluation.

Results: The mean age of patients included in the study was 65.8 years (31-95 years), 52.4 % were men, women-47.6 %. The patients were divided into three age groups: 1) < 65 (n = 101); 2) 65-75 years old (n = 66) and 3) > 75 years old (n = 43). The first group was composed of 66 men and 35 women (65.3 % vs 34.7 %), the second of 30 men and 36 women (45.5 % vs 54.5 %), and the third group 14 namely 29 (32.5 % vs. 67.5 %). Most men, 60 % in the study were aged under 65 years and 40 % were older age (65-75 years - 27.3 % and > 75 years - 12.7%). The typical character of chest pain has been localized: retrosternal 137 (65.2 %) patients, precordial - 66 (31.4 %) patients, epigastric 1 (0.5 %), and 15 (7.1 %) patients without pain. The pain often radiates to the left shoulder - 28 (13.4%) patients, the second was interscapulo vertebral space - 11 (5.2%) patients, followed by radiation in the arm and left hands in 10 (4.8 %) patients. It is followed by beam irradiation in the neck and jaw that meets respectively 5 and 2 (2.4% vs 0.95 %) of patients. Depending on the nature of pain, it can be evidenced by constriction accused by 96 (45.7 %) patients, push supported by 47 (22.4 %) patients, burning character-26 (12.4%) patients. Risk factors detected: hypertension (88.1 %), hyperlipidemia (50 %), family history of cardiovascular disease (12.9 %), diabetes mellitus (23.4 %). All women in the study have 100% postmenopausal risk factors. The presence of one risk factor (hypertension / arrhythmias and management / diabetes) was detected in 11 (5.2%; 8/2/1) patients. The combination of the two risk factors - the 35 (16.7%) patients, the combination of three risk factors - 63 (30 %) of patients, four risk factors -73 (34.8 %) patients and more than four risk factors were determined 28 (13.3 %) of the patients. The Braunwald score study showed 5.3 % of patients with a low risk, 23.3 % - intermediate risk and 71.4 % - had high risk of cardiovascular events. In patients with increased risk compared with low and intermediate score was recorded more frequently high hypertension gradations (62.6 % vs

20.5% and 4.7 %), dyslipidemia (40.5 % vs 15.2% and 2.4%), diabetes (18.6 % vs 4.3% and 0.5 %) and old myocardial infarction (24.8 % vs 8.1% and 0), for all these features missing sex and age differences.

Conclusions:

1. The distribution of patients with UA by gender, revealed prevalence of men with UA (52.4% vs 47.6%), male / female ratio being at an age below 65 years -2:1, at the age of 65-75 years - 1:1 and age > 75 years 1:2.

2. The results of our study showed a high proportion of UA patients with conventional risk factors: like hypertension, dyslipidemia, diabetes mellitus, family history of cardiovascular disease and tobacco habit.

3. Using score Braunwald most of patients with UA have a high estimated risks of major cardiovascular events-71.4%, intermediate risk - 23.3%, low risk - 5.3%.

Key words: Unstable angina, hypertensions, diabetes, myocardial infarction

7. IRON-DEFICIENCY ANEMIA IN INFANTS AND YOUNG CHILDREN

Greco Mariana

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Introduction: Iron-deficiency anemia (IDA) is the most common nutritional deficiency in childhood throughout the world, with a major impact on health of the child in the short, medium and long term. Infants with IDA have been shown to achieve lower scores on mental and motor development tests, weakened immunity, have decreased quality of life in comparison with the infants with normal iron status.

Purpose and Objectives: The goal of this research is the identification of the high risk factors for IDA, clinical and laboratory features of IDA for infants in their earlier stage of development in order to ameliorate the diagnosis and develop prophylactic strategy for it.

Material and Methods: The research has been done on 50 children aged between 3 months and 3 years old. The patients presented at least one of the IDA symptoms: wanness, tiredness caused by efforts, weakness, anorexia, and other unknown causes. The indicator for the diagnosis of IDA was Hb under 110g/l (reference value for age group). Baseline measurements comprised the erythrocyte-related hematologic markers: Hb, hematocrit (Hct), mean corpuscular volume (MCV), mean corpuscular hemoglobin concentration (MCHC), and red blood cell (RBC) count as well as the iron status markers such as serum iron.

Results and discussions: Analysing the cases, it was revealed that the prenatal and perinatal factors with the biggest negative impact on the development of iron deficiency were: pathological evolution of pregnancy (gestations, maternal infections, abortion, chronic diseases of the mother); anemia in pregnancy, newborns with low or excessive birth weight. The persistence of anemia is associated with mistakes in dietary diversification, other nutritional deficiencies and care; recurrent infections; the association of anemia with vit.D deficiency, with weight deficit, as well as, frequently, with overweight conditions. The anemia prevalence was bigger in children from rural environment, most of them had the medium level of Hb between 109-90 g/l, which corresponds to the first grade of severity of IDA. At the same time, decrease of MCV, MCHC and serum iron were registered.

Conclusions: The results of the given study reconfirmed the presence of high risk of development of iron deficiency in infants born from the mothers who suffered from anemia during pregnancy, for infants with low birth weight, malnutrition, low socio-economic status, recurrent infections, from rural environment. Prophylaxis of anemia for the infants and children from high-risk groups is proved to be useful.

Key words: iron-deficiency anemia, young children, risk factors

8. DILATED CARDIOMYOPATHY IN ASSOCIATION WITH THE ALCAPA SYNDROME

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Introduction: Dilated cardiomyopathy is a severe condition in which the heart muscle is weakened and no longer has the strength to pump blood throughout the body. The weakened heart is unable to pump more blood, therefore more blood remains to this level after each heartbeat. As larger amounts of blood remain in the lower chambers of the heart, they expand. Over time, the heart muscle loses its shape and becomes increasingly weaker.

Objectives: Study of clinical evolution and ECG of patients diagnosed with associated dilated cardiomyopathy or ALCAPA Syndrome from a basic treatment with IEC, diuretics and B-blocking agents along with the surgical treatment.

Materials and Methods: 10 children of which 9 diagnosed with dilated cardiomyopathy and 1 child who associates ALCAPA syndrome were evaluated by Ross score, NYHA and echocardiographic. Cardiac index measurement using ECG and CT after receiving basic treatment.

Results: The 9 patients with dilated cardiomyopathy treated by the basic therapeutic method have evolved to improve cardiac indexes (Ross and NYHA) showing an increase in left ventricular ejection fraction gather up 20%. The patient with dilated cardiomyopathy and ALCAPA syndrome showed no improvement following therapy being directed to surgical treatment.

Conclusions: Dilated cardiomyopathies in pediatric age have an 80% response rate to basic treatment with IEC, diuretics and B-blockers that lead to Ross and NYHA amelioration. Dilated cardiomyopathy associated with ALCAPA syndrome has one treatment option: heart transplant.

Keywords: evolution, dilated cardiomyopathy, treatment, children, ALCAPA syndrome

9. CLINICAL CHARACTERISTICS OF GRAVES' ORBITOPATHY

Iacob Sergiu

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Introduction: Graves' orbitopathy (GO) constitutes a major clinical and therapeutic challenge. GO is an autoimmune disorder representing the most common and most important extrathyroidal manifestation of Graves' disease. Although the pathogenesis of GO is beyond the scope of this study, attention is drawn to the link between the orbit and thyroid, which has important clinical and therapeutic implications. Optimal management of GO requires a coordinated approach addressing the thyroid dysfunction and the orbitopathy.

Purpose and Objectives: To establish the relationship between Graves' disease evolution and the onset of ocular manifestations. To evaluate the activity and severity of GO in our study group.

Materials and Methods: This study is based on the clinical examination of 16 patients, using the Clinical Activity Score (CAS) and the NOSPECS classification of the disease's severity.

Results: During this study, we have seen 16 patients (32 eyes). 12 of these patients presented bilateral involvement, while 4 – unilateral involvement. We have studied the onset of Graves' orbitopathy in relation to the onset of hyperthyroidism, and we've determined that most commonly GO occurs at the same time or follows the hyperthyroidism (up to 81% of cases). The activity of GO was determined using CAS. We've determined that the spontaneous orbital pain, gaze evoked orbital pain, conjunctival redness and the eyelid swelling were the most common manifestations presented by our patients (50–75% of cases), while eyelid erythema was the less common (12.5%). The frequency of active and inactive cases was almost equal, with a minor prevalence of active processes. The disease's severity was appreciated using NOSPECS classification. Most patients presented a minimal grade of severity (43.7% – 7 patients), while 37.5% (6 patients) have presented a moderate grade and only 18.8% (3 patients) – maximal severity. The first two classes of the

NOSPECS (only signs and soft tissue involvement) were the most common, being found in 81.3% (13 cases) and 62.5% (10 cases) of patients respectively.

Conclusions: The amount of minimal and moderate severity of the Graves' orbitopathy is imposing (81.2%) in study group. These results indicate that in the majority of GO cases is early detected. The frequency of the CAS manifestations, as well as the predominance of the NOSPECS classes, matches the results found in clinical randomised studies and literature.

Keywords: Graves' orbitopathy, NOSPECS, CAS, hyperthyroidism

10. THE LEVEL OF SEXUAL HORMONES IN WOMEN OF REPRODUCTIVE AGE WITH CIRROTIC PORTAL HIPERTENSION

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Background: Chronic liver diseases are commonly associated, in dependence of severity and duration of disease, with menstrual cycle disorders such as amenorrhea and anovulation. In most of cases the possibility of pregnancy is poor but sometimes these women become pregnant.

The aim: To estimate the concentration of sexual hormones in women of reproductive age with cirrhotic portal hypertension, in dependence of functional liver reserve Child Pugh.

Materials and methods: We selected 60 women of reproductive age with cirrhotic portal hypertension, caused by chronic virus hepatitis. The functional liver reserve was determined, according to the Child A/B/C -36/10/4. We tested the plasmatic levels of estrogen, progesterone, LH and FSH.

Results: In the first group in 36 cases (60%), where the functional reserve of liver Child Pugh A, was good, the medium level of E2 in all the phases of menstrual cycle was at upper admissible range (130,7±30,5pg/ml). In the second and the third group with poor functional reserve Child B,C in 24 cases (40%) the level of estrogen have been increased in all the phases of menstrual cycle (366,6±46,3pg/ml). This fact can be explicated by functional insufficiency of the liver and perturbances of protein synthesis in liver, which cause severe pathogenetic infringements in estrogenic metabolism. The plasmatic medium concentration of progesterone in the first group was 34,5±3,6 nmol/l and in group with poor liver reserve it was a breakdown of progesterone contents till 16,7±3,4nmol/l (p<0,05). There were no significant statistic difference between the levels of LH and FSH in presented groups (p>0,05).

Conclusions: The increased value levels of estrogen and poor concentration of progesterone in women with cirrhotic portal hypertension, explain the absence of menstruation and anovulatory cycles in patients with poor liver reserve, which are the main factors of infertility in these patients.

Keywords: Infertility, sexual hormones, portal hypertension

11. THE SPECTRUM OF SENSITIZATION IN SCHOOL-AGE CHILDREN WITH RESPIRATORY ALLERGOPATOLOGY

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Introduction: Allergic sensitization seems to be an important risk factor for subsequent onset of persistent respiratory allergic pathology during childhood and adulthood. Allergic disorders are referred to the most common with trend of increase of sensitization to allergens in the last decade.

Purpose and Objectives: The aim of the study was to evaluate components of atopic sensitization to the most common allergens in children with perennial allergic rhinitis (AR) with/without concomitant bronchial asthma (BA).

Materials and methods: On the base of the Children Clinical Hospital (Chernivtsi, Ukraine)

35 school-age children of 6-18 years old with perennial AR, 18 of whom were sick with concomitant BA, were examined.

Hypersensitivity to 18 mite, epidermal, fungal allergens and insect cockroach allergen which mostly determine the perennial allergic clinical manifestations, and pollen (grass, trees) allergens significant for seasonal allergic manifestations, was studied according to the skin prick tests (SPT).

Results: In 35% of patients the presence of sensitization to only one group of allergens was revealed, particularly in the 5% - to epidermal allergens of cat and dog and in 30% - to house dust mites. In the other children the sensitization to at least one of house dust mites and one other group of studied allergens was found. Polysensitization was found: in 35% of children to at least one more group of allergens, in 15% - up to two and in 5% - to all the studied four groups of allergens.

In the groups of children with concomitant asthma and AR and exclusive AR no any differences in sensitization to fungi allergens according to prick tests were revealed.

Conclusion: In more than half of children with respiratory allergies not only hypersensitivity mite allergens (*D.pteronysinus* and *D.farinae*), but also a significant sensitization to at least one more group of aeroallergens was revealed.

Keywords: Children, allergic test, sensitization.

12. CASE REPORT: COMPUTER TOMOGRAPHY PRESENTATION OF WEGENER'S GRANULOMATOSIS IN A 10-YEAR-OLD BOY WITH RENAL SYNDROME.

Popușoi Diana

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Background: The term pulmonary-renal syndrome consists of a group of complex and often severe disorders, although rare in incidence, and includes Wegener's Granulomatosis (WG) which is a predominantly small-vessel vasculitis associated with antineutrophil cytoplasmic antibodies (ANCA). There are few reports describing its clinical features and outcome in children. We report computed tomography (CT) findings in a 10-year-old boy referred to our Pediatric Department.

Materials and Methods: A 10-year-old boy presented in April 2013 with rhinitis, fever and dry cough. He was prescribed antibiotics with moderate improvement of the general condition. His examination results were unremarkable except low hemoglobin level (9.9 g/dL) and markedly increased erythrocyte sedimentation rate (44 mm/h). A month later he had been admitted to Nephrology Unit with complaints of proteinuria, hematuria and anemia. In June he developed also arthritis. In October 2013 the child was admitted to the Pediatric Intensive Care Unit in a severe condition. Antineutrophil cytoplasmic antibodies (ANCA) were positive with antigen specificity for myeloperoxidase (anti-MPO 37 KU/L). The other laboratory results included: mild anemia and leukocytosis; proteinuria (69 mg/kg/day); increased blood urea nitrogen (BUN) and creatinine (10.4 mmol/L and 123 mmol/L, respectively). Thoracic CT revealed a solitary nodule 1.5x1 cm in the postero-basal segment of the inferior lobe in the left lung. Renal biopsy with fine needle revealed pauci-immune crescentic glomerulonephritis. He was diagnosed as WG from the clinical, radiologic, laboratory and morphologic findings and was given treatment with methylprednisolone and cyclophosphamide.

Results and discussion: The CT findings of pulmonary WG include multiple nodules or masses with or without cavitation, and are particularly helpful to identify cavities within nodules. The ANCA-associated pulmonary-renal syndrome, ANCA positive with antigen specificity for myeloperoxidase (anti-MPO), is almost always caused by microscopic polyangiitis and this association can be manifested as rapidly progressive renal failure, as happened with our patient.

Conclusions: Our aim in presenting this case is to alert clinicians that, even without the definitive histological diagnosis, it is possible, based on clinical history and physical examination, and whenever possible serological tests (ANCA and anti-GBM), to start immunosuppressive therapy, that can avoid the irreversible loss of renal function and interrupt the fatal course of lung complications.

Keywords: Pulmonary-renal syndrome, ANCA, vasculitis

13. ANEMIA MANAGEMENT IN CHRONIC HEMODIALYSIS PATIENTS

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Introduction: Anemia is one of the most important consequences of chronic kidney disease. It is caused by a defect in erythropoietin regulation. Anemia can have an early onset, but the severity and the prevalence increases with the progression of the kidney disease.

Purpose and Objective: To do a complex examination of the treatment of anemia in Republic of Moldova and the efficacy of the methods used in the hemodialysis departments.

Materials and Methods: This is a retrospective study, analyzing the patient documentation of 47 patients from the department of Nephrology and Hemodialysis of the Municipal Hospital "St. Trinity" and from the department of Hemodialysis of the Republican Clinical Hospital.

Results: In Republic of Moldova, Reocormon[®] is used for the treatment of anemia in chronic hemodialysis patients. Neither of the 47 patients examined had been treated with the necessary dosage and for the right period of time due to financial problems. Only 5 of the 47 patients have reached the recommended targeted hemoglobin level. This could be the result of an inadequate dosage, a poor control of iron levels or because of an associated chronic disease, such as a chronic inflammation of the kidney or the urinary tract.

Conclusions: Anemia is relatively rare in the incipient stages of kidney disease (1-3 stages KDOQI). The prevalence of anemia starts to increase significantly when the glomerular filtration rate < 60 mL/min. Iron level should be checked before administering an erythropoiesis-stimulating agent.

Keywords: Anemia, chronic kidney disease, erythropoietin, erythropoiesis

14. DETERMINATION OF LEVEL OF LEPTIN IN PATIENTS WITH OBESITY AND COMPONENT OF METABOLIC SYNDROME

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Introduction: Obesity is the chronic polyetiological disease, which is associated with some genetic and neurological factors, changes of functions of the endocrine system, one of the serious factors of occurrence of diabetes II, essential hypertension, dyslipidemia, cardiovascular disease, reproductive disorders. In the basis of disorders of metabolic processes and occurrence of listed above conditions lies the resistance to insulin. Leptin has links with weight of adipose tissue, effect on insulinemia and resistance to insulin.

Aim of study: Analyze BMI, level of leptin, cholesterol and triglycerides in blood in patients with obesity (I, II, III lvl.) with components of metabolic syndrome, such as: diabetes II and essential hypertension.

Materials and methods: Since 2013 to 2014 we examined the 28 patients aged from 38 to 65 years old (19 female and 9 male). In this group the 11 patients were ill with obesity of first level, 9 patients - obesity of second level and 8 patients - obesity of third level. All patients were ill with moderate diabetes in phase of subcompensation. During the examination in all patients was the condition of metabolism of carbohydrate, lipid, protein, electrolyte and instrumental examination.

Discussion results: On the basis of examination, in the patients with obesity of first level, the BMI was $32,00 \pm 0,38 \text{ kg/m}^2$, level of leptin - $34,84 \pm 6,40 \text{ ng/ml}$, level of cholesterol - $5,89 \pm 0,31 \text{ mmol/l}$ and level of triglycerides - $2,36 \pm 0,9 \text{ mmol/l}$. In the patients with obesity of second level, the BMI was $39,20 \pm 0,49 \text{ kg/m}^2$, level of leptin - $35,48 \pm 6,34 \text{ ng/ml}$, level of cholesterol - $5,35 \pm 0,36 \text{ mmol/l}$ and level of triglycerides - $270 \pm 0,41 \text{ mmol/l}$. In the patients with obesity of third level, the

BMI was $32,00 \pm 0,38 \text{ kg/m}^2$, level of leptin - $69,99 \pm 5,3 \text{ ng/ml}$, level of cholesterol - $5,86 \pm 0,77 \text{ mmol/l}$ and level of triglycerides - $2,67 \pm 0,42 \text{ mmol/l}$. Results of study suggest that level of leptin, cholesterol and triglycerides increased in patients with obesity and component of metabolic syndrome.

Conclusions:

1. In patients with obesity and component of metabolic syndrome the level of leptin, cholesterol and triglycerides was increased.

2. Preventive health care and treatment of obesity promotes the prevention of increased levels of leptin, cholesterol and triglycerides.

Keywords: Leptin, obesity, metabolic syndrome.

15. CLINICAL SPECTRUM AND RISK FACTORS IN HYPERTROPHIC CARDIOMYOPATHY IN CHILDREN

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Introduction: Hypertrophic cardiomyopathy (HCM) accounts for 42% of childhood cardiomyopathy and has an incidence of 0.47/100,000 children (Colan SD, 2010). Clinical presentation is polymorphic, including sudden death may be the first symptom of HCM at any age. The risk of sudden cardiac death (SCD) is >1% annually in unselected HCM patients but increases to 5% or more if risk factors are presents. According to a recent report on survival of patients with HCM, a family history of cardiac sudden death was a risk factor for SCD in adult series, but it was much higher in patients <18 years of age (Dimitrow P., 2010). Several risk factors associated with an elevated risk of SCD in HCM adult patients have been identified, but risk factors in the pediatric population are not yet finalized.

Purpose and Objectives: The detection of unfavorable risk factors in the primary diagnosis of hypertrophic cardiomyopathy in children.

Materials and Methods: A retrospective study was performed on 7 children diagnosed primary with HCM, interned in departement of Pediatric cardiology of Child and Mother Institute (2009-2010). All subjects underwent detailed assessment that included clinical history (symptoms, when they started, date of diagnosis of the disease, family history data on evolution, past and present therapy, etc.), clinical examination, 12-lead electrocardiogram (ECG), ECG Holter monitoring and echocardiographic study (EcoCG, M-mode, two dimensional and Doppler). Each clinical case was analyzed with reference to detection the presence of unfavorable risk factors at primary diagnosis.

Results: The primary diagnosis of HCM was established at the age of the infant in 42,8% of cases, of whom 2 patients had a positive family history. Most children (71,4% of cases) were suspected to specific symptoms: chest pain, dyspnea and intolerance at effort. Standard ECG determined left ventricular hypertrophy (LVH) in 100% of cases. The EcoCG measurements, allowed the establishment HCM phenotype: 4 (57%) patients having the symmetric form; 3 patients - asymmetric form (with the involvement of the interventricular septum (IVS), 3 patients had the thickness report IVS / LV posterior wall thickness > 1.3. Concomitantly standard EcoCG in rest allowed confirmation of the LV outlet tract obstruction (LVOT) to 3 patients, and 1 patient was appreciated the LVOT phenomenon by performing the effort EcoCG. In 5 patients (71,4%) was determined the significant increase LV mass myocardium, in 3 children were detected the increase of the left atrial cavity and 1 child - right ventricular involvement.

Conclusion: Primary diagnosis of HCM was suspected by cardiac symptoms; only 30% of children were found preclinical and positive family history. Early emergence of symptoms, aggravated family history and listed EcoCG criteria: significant increase in LV mass, the LV outlet tract obstruction and right heart involvement, may be considered unfavorable risk factors in the evaluation of children with HCM, including for the SCD syndrome.

Keywords: Hypertrophic cardiomyopathy, risk factors, echocardiography, cardiac sudden death

16. PILOT HEARING SCREENING IN SCHOOL AGE CHILDREN IN REPUBLIC OF MOLDOVA Skarżyński P.H., Pavlovschi D., Piłka A., Ludwikowski M., Pierzyńska I., Żelazowska M.

Introduction: Many countries have implemented newborn hearing screening programs, resulting in early intervention and therapy. In spite of that, there is a significant number of schoolchildren with hearing problems. Hearing loss is a common and considerable disability that harms educational performance of schoolchildren in developing countries. Lack of a simple and practical screening protocol often deters routine and systematic hearing screening at school entry.

Purpose and Objectives: The pilot study assessing the hearing in the population of pupils who begin their education in five random primary schools in Moldova.

Material and Methods: Hearing screening was conducted in a group of 179 children from three primary schools in Chisinau in Republic of Moldova. Screening was performed using the Sense Examination Platform; on the basis of the audiometric procedure of measuring the hearing threshold. Positive result of hearing screening was defined as equal as or more than 25dB at least at one frequency in either ear. Additionally subjective assessment was carried out on the basis of parents questionnaires.

Results: The study was performed in 3 schools: in the 1st were examined 69 children, from which a positive result was at 8.7%, in the 2nd - 52 (25% positive) and in the III-rd - 58, with positive result at 10.34%. A total of 179 children were examined, out of which at 13.97% - a positive test result. All children with positive results of hearing screening were examined by local otolaryngologists.

Conclusions: The obtained results confirm the significant prevalence of hearing problems in school-aged children. Based on the results, the implementation of hearing screening as a routine procedure in the medical care in schools is strongly recommended.

Keywords: Hearing screening programs, hearing loss, school-children.

17. ACUPUNTURE AS A METHOD OF ANALGESIA

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Introduction: Acupuncture as a therapeutic method of treatment comes from China and is becoming more widespread in Europe nowadays. It is based on the meridian theory and assumed mechanisms of action: autonomic, neuroendocrine and bioenergetical. The needles are pierced at specific points of the body, placed along the meridian line of movement which on the body of energy. If at their path appears an exciting form of stinging or pressure, then it can reduce pain and improve body condition that was affected.

Purpose and Objectives: The effectiveness of acupuncture in postoperative analgesia, which was conducted in the National Scientific and Practical Center for Emergency Medicine (IMSP CNSPMU) Microsurgery Department.

Material and Methods: We selected 20 patients between 20 and 50 years, suffer from skin trauma, soft tissue and vascular structures in the mining regions, which underwent a microsurgical intervention. They were divided into two groups of 10 patients each. Patients of the first group received 3 sessions of acupuncture and analgesic medication. The second group had only two analgesic drugs. All patients were analyzed according to subjective criterias: Visual-Analogue Scale (VAS), personal comfort and the objective criterias: blood pressure, temperature, respiratory rate, heart rate. The materials used were: set of individualized acupuncture needles, Visual- Analogue Scale, tensometer, thermometer, assessment questionnaire for postoperative pain management, patient satisfaction questionnaire for assessing the management of acute postoperative pain, patient informed consent about participating at the study.

Results: The study showed that the first group which received minor analgesics, like sol. baralgin in combination with acupuncture by demand, a value of 5-6 points at VAS and objective

indexes in the normal range. In the control group were administered major analgesics, like promedol, schematically, and VAS score was 8-9 points and clues major objective, as was observed in 4 patients dyspeptic side effects.

Conclusion: We can say that acupuncture is a non-invasive method, followed by a stable postanesthetic period with persistent analgesia and postoperative evolving remarkably good, due to the absence of adverse effects such as nausea and vomiting, which include early enteral feeding, early mobilization and less adverse effects.

Keywords: Acupuncture, Visual-Analogue Scale (VAS), pain

18. THE OPPORTUNITY OF PERSISTENT VIRAL INFECTION IN CLINICAL AND IMMUNOLOGICAL MANIFESTATION OF COMMUNITY-ACQUIRED PNEUMONIA

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Introduction: Pneumonia is the cause of death of more than 2 mln children every year, which represents approximately 20% from all deaths. In RM the prevalence is 140-150 at 1000 of children. According to WHO, the mortality caused by herpetic infection is placed on 2nd place (15.8%) in group of viral infections, followed by H. influenzae. Death rate in CMV infection is evaluated at 30 %, and 80%-100% of the survivors will develop such sequelae as: progressive deafness, mental retardation, microcephaly. Affectation of respiratory system at children with CMV infection is estimated at 49%, clinical manifested by respiratory distress syndrome and pneumonia.

Objectives: To highlight the risk factors and determine the clinical and immunological particularities of CAP associated with persistent viral infection.

Materials and Methods: 1. Examination of medical cards. 2. Paraclinical Examination (hemoleucogram, biochemical examination, immunological examination using the Mancini's method - IgA, IgG, IgM; anti - CMV serological examination, anti - CMV - IgA; 3. Screening methods: chest X-ray, internal organs Eco; 4. Consultation of Infectionist, gastroenterologist, psycho-neurologist, allergist, etc.; 5. The obtained investigations results were statistically processed by using variational and descriptive analysis in Microsoft Excel statistic programs. In each group we had the follow age structure: 1-6 months, 6-12 month, 1-3 years, and 3-5 years. The distribution in study groups was the similar as in the control one.

Results: From 106 children with CAP:

1st lot: Anti-CMV IgM positive, Anti-CMV Ig G positive - 31;

2nd lot: Anti-CMV IgM negative; Anti-CMV Ig positive - 44;

3rd lot: Anti-CMV IgM negative; Anti-CMV IgG negative - 31;

1. Risk factors that determine the severe evolution of CAP at infants with positive herpetic IgM or IgG are herpetic family history 61.3%, in special with MV 43.07 %.

2. Clinical diagnostic markers in suspicion of persistent viral infection - family persistent viral history, congenital pneumonia, prolonged neonatal jaundice, toxic hepatitis.

3. The association of CAP with IgM positive herpetic infection, appreciate the severity of disease ($35.48 \pm 1.4\%$, $p < 0.05$), its duration (more than 1 month, 2 week of hospitalization) and the presence of complications ($83.8 \pm 2.35\%$, $p < 0.005$) and comorbidities at this children.

Conclusions: The herpetic infection is an important risk factor that needs to be evaluated and be very seriously studied. Persistent herpetic viral infection can be qualified as a medico-social problem, because of its clinical and immunological manifestation, distribution, amplitude and comorbidities and we must take an attitude behind this problem, as soon as possible.

Keywords: Recurrent respiratory diseases, community-acquired pneumonia, persistent viral herpetic infection, children under 5 years

19. ANTIMICROBIAL SUSCEPTIBILITY OF UROPATHOGENIC *ESCHERICHIA COLI* STRAINS

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Introduction: Urinary tract infections (UTIs) are some of the most common infections experienced by humans, exceeded in frequency among ambulatory patients only by respiratory and gastrointestinal infections. The vast majority of uncomplicated UTIs are caused by the Gram-negative bacillus *Escherichia coli*, with other pathogens including Enterococci, *Staphylococcus saprophyticus*, *Klebsiella* spp. and *Proteus mirabilis*. The extensive and inappropriate use of antimicrobial agents has invariably resulted in the development of antibiotic resistance which, in recent years, has become a major problem worldwide. In patients with suspected UTI, antibiotic treatment is usually started empirically, before urine culture results are available. To ensure appropriate treatment, knowledge of the organisms that cause UTI and their antibiotic susceptibility is mandatory. Occurrence and susceptibility profiles of *E. coli* show substantial geographic variations as well as significant differences in various populations and environments.

Objectives: The aim of this study was to determine the prevalence and antimicrobial susceptibility of *E. coli* from clinical samples.

Materials and Methods: Between 2010 and 2013, a total of 1916 samples from hospitalized patients in Republican Clinical Hospital were analyzed for isolation and identification of bacteria and antimicrobial susceptibility testing. *E. coli* was isolated from 542 (42.7%) samples. Bacterial isolates were identified by standard biochemical tests. Antibacterial susceptibility test was performed by the disc diffusion method was performed according to NCCLS (National Committee for Clinical Laboratory Standards).

Results: *E. coli* was isolated from 542 (42.7%) samples. High resistance rates to cefazolin (87.5 %), ampicillin (52.0%), cefepime (62.0%), moxifloxacin (68.0%) were documented. However, significantly high degree of sensitivity rates to netilmicin (90.0%), norflaxocin (82.9%), imipenem (93.0%), meropenem (90.0%), chloramphenicol (95,2%).

Conclusions: *Escherichia coli* is the leading cause of urinary tract infections in humans. A rise in bacterial resistance to antibiotics complicates treatment of infections. The results of this study show high rates of antimicrobial resistance to cefazolin, ampicillin, cefepime, moxifloxacin. High degree of sensitivity rates to netilmicin (90.0%), norflaxocin (82.9%), imipenem (93.0%), meropenem (90.0%), chloramphenicol. Periodic monitoring of antimicrobial susceptibility both in the community and hospital settings is recommended.

Keywords: *Escherichia coli*, antimicrobial susceptibility, urinary tract infections.

20. THE MANAGEMENT OF INTERDISCIPLINARY CONSULTS OF THE GERIATRIC PATIENT WITH CO-MORBIDITIES

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Introduction: The geriatric patient must be approached differently due to the association of comorbidities, the difficult anamnesis and the possible cognitive degradation. Therefore, determining the etiology of an acute episode requires a multidisciplinary approach and a competent differential diagnosis.

Material and methods: We present G.A. patient, a 77-year-old female, who was consulted in the Emergency Department and admitted to the Internal Medicine-Geriatrics Department because of syncope associated with dyspnea with orthopnea, atypical chest pain and coughing with mucous expectoration. These symptoms could be due to a number of underlying conditions, such as: Cardiovascular causes – the patient suffered a DDD pacemaker implantation 2 months ago after atrial

tachycardia with first degree atrioventricular block, second degree atrioventricular block type I and type II, associated with left ventricular dysfunction - we need to consider: a pacemaker malfunction, congestive heart failure or an acute coronary syndrome (cardiology consult); Neurological causes – a possible transient ischemic attack (neurological consult); Orthostatic hypotension as a complication of type 2 diabetes mellitus and/or possibly the effect of antihypertensive medication – the patient is suffering from grade 3 hypertension) (diabetology consult); vertebrobasilar insufficiency secondary to spondyloarthropathy (rheumatology consult); Treatment and lifestyle modification non-compliance, frequent at the geriatric patient (a thorough anamnesis).

Results: The clinical exam, paraclinical tests and interdisciplinary consults established that the treatment and lifestyle modification non-compliance led to an acute decompensated heart failure.

Discussions: The particularity of this case resides in the extensive investigations needed to establish the cause of a syncopal episode in a geriatric patient with multiple comorbid conditions. Medical advice and supervision should be the hallmark of her future life. This case presentation wishes to emphasize the need to open doctor-patient relationships, efficient and complete anamnesis, and also the importance of therapy adherence.

Keywords: geriatric patient, syncope, treatment non-compliance.

21. RISK FACTORS OF TEENAGE OBESITY

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Introduction: Today, nearly a third of youths are overweight or obese, more than 23 million children and teenagers. Since 1980, the obesity rate has more than doubled (from 5.0% to 12.4%) among children aged 2-5 years, almost tripled (6.5% to 17%) among children aged 6-11, and more than tripled (from 5.0% to 17.6%) in adolescents aged 12-19 years both in developed countries and in the developing ones. According to WHO, the prevalence of teenage obesity and overweight, in Romania is 10.6% for girls and 18.6% for boys. According to national data, in Republic of Moldova, in 2012, there were 3171 cases of obesity in children aged 0-18 years, of which 969 new cases. Incidence is 13.16 and prevalence is 43.06 cases per 10,000 population. It was necessary to study this problem in our region. So the purpose is to study risk factors of obesity in adolescents from Pedagogical College "Vasile Lupu" in Orhei and Colleges of Medicine in Orhei and Chisinau.

Materials and methods: The study group consisting of 250 adolescents from Pedagogical College "Vasile Lupu" in Orhei and Colleges of Medicine in Orhei and Chisinau was divided into 3 groups depending on BMI and sex. For obesity body mass index (BMI) have to be at or above the 95th percentile for gender and age, while for overweight at or above the 85th but below the 95th percentile and for normal weight BMI from 5th to 85th percentile. It was a clinic-statistical retrospective study and it was conducted for the period of 2013-2014. There were developed two questionnaires, one for teens and one for parents, which included questions on anamnesis, food investigation, the investigation of physical activity and harmful habits. BMI was calculated using BMI Calculator Excel. Statistical analysis using t-Student test. CI = 95% if $p < 0.05$ and OR.

Results: In the study group of 250 adolescents aged 15-18 years from the Pedagogical College "Vasile Lupu" and College of Medicine in Orhei and Chisinau, the frequency was 14.4% overweight and obesity frequency was 17.6%. Overweight was presented mainly in girls 10.4% and obesity cases in boys 11.2%. At the age of 17 to 18 years there has been a progressive increase in body mass as both girls and boys. The analysis of results and the identification of risk factors was performed using the values obtained for $p < 0.05$ and $OR > 1$.

Conclusion: Risk factors for obesity in teenagers have been identified: the presence of obesity in first-degree relatives, the small number (<2) meals per day, eating fast food, lack of physical activity, time spent watching TV and not respecting the sleep-wake.

Keywords: Teenagers, obesity, risk factors

22. IS IT SILENT MYOCARDIAL ISCHEMIA?! – CASE REPORT

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Introduction: Silent myocardial ischemia is defined as objective documentation of myocardial ischemia in the absence of angina or anginal equivalents. Silent ischemia is an intriguing phenomenon and is causally related to serious or fatal cardiac events. Histopathological studies give credence to the idea that recurrent ischemia may cause irreversible myocardial changes related to the development of fibrotic myocardium which would act as an ideal substrate for the development of life-threatening arrhythmias or lead to the development of congestive heart failure.

Case report: We present the case of a 62 year old patient, which prior to a non-cardiac surgical procedure discovered accidentally ischemic modifications on the ECG (ST segment depression and negative T waves in V3-V6). Thus, he was sent for further cardiological investigations. The patient had no history of cardiovascular pathology, being an occasional smoker. During the clinical examination the only thing that stood out was that he had a BMI of 27.4 kg/m². Hematological analyses showed a slightly raised total cholesterol and LDL-cholesterol. The echocardiography was normal and excluded a left ventricular hypertrophy or an obstructive hypertrophic cardiomyopathy. He was referred to an ECG exercise stress test that revealed positivation of T waves but with no symptoms of angina during the test. Finally, in order to certify coronary lesions, the patient was submitted to a computerized tomographic angiography that showed permeable arteries, with no stenosis.

Discussions and Conclusions: Considering all the information mentioned above, the case of this patient is challenging because of the ischemic modifications on the EKG with no organic underneath causes. In the future, the patient will continue the scheduled follow-up in the clinic.

23. DETERMINATION OF VASO-REGULATOR'S CONCENTRATION LEVEL IN MEN AND WOMEN WITH ESSENTIAL HYPERTENSION

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Introduction: The role of endothelin-1 (ET-1) as vasoconstrictor (VC) and marker of vascular endothelial dysfunction has been well studied, however the properties of vasodilator (VD) C-type natriuretic peptide (CNP) continue to be explored. We can assume that their ratio reflects the balance VD / VC.

Purpose and objectives: Study of the correlation between concentrations of CNP and ET-1 in male and female patients with essential hypertension (EH).

Materials and Methods: We have examined 119 men and 139 women, including 79 healthy men (mean age 54.64 ± 0.40 years) and 80 women (57.49 ± 0.48 years) of the control group. In 40 men (mean age 55.01 ± 0.36 years) and 50 women (56.91 ± 0.36 years) AH II-III degree was diagnosed. In all examined patients the levels of CNP and ET-1 were determined by immunoenzyme method. We have also calculated patient's correlation index using CI (SNP/ET-1).

Discussion results: It was revealed that the quantity of CI in males of the control group was lower than in women: (1.39 ± 0.02 u) and (1.44 ± 0.04 u), respectively. The CNP level was higher in men, and ET-1 in females (p ≤ 0.05). Significant CI differences depending on the sex of the patients were not identified.

Conclusion: Changes in the levels of CNP and ET-1 in the blood of men and women were differently reflected. CI was lower in hypertensive patients than in the control groups, indicating the predominance of vasoconstrictor concentration compared with healthy individuals.

CNP/ET-1 index can be used to diagnose hypertension.

Keywords: Vaso-regulators, essential hypertension

24. MASSIVE HEMOPTYSIS IN MITRAL STENOSIS

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Introduction: Massive hemoptysis is an uncommon but life-threatening emergency. The loss of at least 600 ml of blood within a 48-hour period has been associated with a high mortality rate. Although most commonly hemoptysis caused by valvulopathies is not massive enough to be life threatening, have been reported cases of asphyxia after pulmonary hemorrhage in patients with mitral stenosis. Hemoptysis and occurrence of pulmonary edema associated with end stage and severe mitral stenosis would be an indication for early surgery.

Aim of the study: To assess the clinical, laboratory aspects and the presentation of a clinical case with massive hemoptysis and mitral stenosis occurred at mature age.

Material and methods: The patient was hospitalized, examined, evaluated in Hospital "Saint Trinity", Chisinau.

Results: Patient aged 45 years was hospitalized in Emergency Department due to pulmonary hemorrhage (>21/24 hours) and hemorrhagic shock. From anamnesis, the patient is known with rheumatic heart defect – mitral stenosis at the age of 25 years. It is of interest that massive hemoptysis in this patient occurred as a first manifestation of mitral stenosis. He administered anticoagulation therapy – Warfarin. Physical examination on admission revealed a normal weight patient in critical condition. Relative limits were deflected: left heart border – by 4 cm and right – by 2 cm, arrhythmic heart sounds, atrial fibrillation, diastolic murmur, distended jugular, peripheral edema at the calves, lower liver edge - 4 cm below the right costal border.

Echocardiographic examination revealed the patient's hardened, calcified aorta walls, indurated annulus and aortic valves, calcified, with formation of the moderate regurgitation (II degree), mitral annulus calcification, mitral valves endured pronounced calcified stenosis formation, transmitral pressure gradient – 36 mmHg., mitral orifice area – 1,5 cm², considerable dilatation of the left atrium, right atrium, moderate dilatation of the right ventricle, asymmetrical hypertrophy of the left ventricular myocardium, ejection fraction – 60%. Tricuspid valve insufficiency – IIIrd gr. Pulmonary artery valve insufficiency – IInd gr. Severe pulmonary hypertension, pulmonary artery pressure – 68 mmHg. Initial treatment consisted from antishock therapy (ice bag, airway maintenance, oxygen 2-4 l/min, permanent venous access, fluid resuscitation, hemostasis and hemodynamic correction), β -blockers and digitalis administration. Patient's general condition improved by stopping hemoptysis and reducing dyspnea, but pulmonary bleeding complications required a special intervention – the reference to cardiac surgeon.

Conclusion: Our patient's history and clinical course illustrate that severe hemoptysis may complicate moderate degrees of mitral stenosis. The patient had the high thromboembolic risk necessitated anticoagulation therapy. Mitral valve operation would appear to be beneficial in cessation of hemoptysis.

Keywords: Massive hemoptysis, mitral stenosis

25. PREVALENCE AND SHORT-TERM PROGNOSTIC IMPLICATIONS OF ADMISSION HYPERGLYCEMIA IN NON-DIABETIC ACUTE MYOCARDIAL INFARCTION PATIENTS

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Introduction: In patients with acute myocardial infarction, elevation of plasma glucose levels is associated with worse outcomes.

Purpose and Objectives: The aim of this study was to evaluate the prevalence of newly

hyperglycemia and the association between admission hyperglycemia and in-hospital mortality in patients with acute myocardial infarction (AMI).

Materials and Methods: Retrospective observational study included 125 consecutive patients (≤ 70 yo) with AMI hospitalized at "Sfinta Treime" Municipal Hospital, Chisinau, in period 1.01.2012-31.12.2012. Patients with known diabetes mellitus ($n=25$) or non-diabetic with fasting hyperglycemia ($n=17$) were excluded, while those with previous myocardial infarction or stroke were enrolled.

The study sample was divided into normoglycemic patients (NDN; $n=50$; fasting glucose <6.1 mmol/l and 2-h post-load glucose <7.8 mmol/l) and those with admission hyperglycemia (NDH, $n=33$), without previous history of diabetes (admission glucose ≥ 7.8 mmol/l).

Data were analyzed in MS Excel (2010). Results are presented as means and SD. Pearson correlation coefficient (r) was determined for each variable and $p < 0.05$ was considered statistically significant.

Results: The results of the present investigation confirm that, even among non-diabetic patients, the prevalence of elevated glucose levels upon admission for AMI is high ($n=33$; 33%), the prevalence was higher in men (21 vs. 12). Compared to normoglycemic, NDH patients were younger (53.64yo vs. 57.30). As expected, mortality were significant lower in NDN ($n=2$; 4% vs. $n=10$; 30%). Mortality was higher in males (7 vs. 3 in NDH; 2 vs. 0 in NDN). In NDH group death occurred predominantly in younger group (9 patients ≤ 60 yo and 1 person >60 yo, compared to 1:1 in NDN). In both groups, admission glucose levels were higher in non-survivors (5.68 ± 1.24 vs. 5.64 ± 0.92 in NDN and 10.85 ± 2.44 vs. 10.13 ± 2.34 in NDH; $p < 0.001$). A strong uphill correlation was observed between admission glucose and mortality (r -coefficient 0.53). NDH had longer hospital stay (456.00 ± 30.99 h vs. 426.00 ± 21.08 ; $p < 0.001$). Death occurred earlier in NDH (37.66 ± 15.19 vs. 72.70 h, $p < 0.05$).

It suggests that the presence of hyperglycemia in subjects who present with AMI offers a survival disadvantage.

Conclusions: Hyperglycemia on admission is an independent predictor of poor in-hospital outcome and mortality in AMI and could be used in the stratification of risk in these patients. The impact of hyperglycemia as a risk factor in AMI is more pronounced in younger patients (≤ 60 yo) compared to those older than 60yo.

Keywords: Acute myocardial infarction, admission hyperglycemia, mortality

26. CASE REPORT: DILATED CARDIOMYOPATHY – A SUCCESSFUL RESPONSE TO TREATMENT

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Introduction: Dilated cardiomyopathy (DCM) is a common cause of congestive cardiac failure all over the world. The incidence is 5-8 cases per 100 000 population per year, men suffer 2-3 times more often than women, mean age of patients - 30 to 45 years, rarely it is met in elderly patients, as it was in our case. Regardless of the type of DCM, many years they are asymptomatic and first manifestation usually being an advanced state with features of congestive cardiac failure III-IV (NYHA) or with complications like arrhythmia and sudden cardiac death and have a high mortality rate of 15.0-50.0% at 5 years. Treatment of DCM is aimed to reduce the congestive symptoms and the number of episodes of decompensations and to improve the quality of life.

Materials and methods: We present a literary reference to cardiomyopathy and a clinical case of DCM. Demonstration of a case is of great interest to clinicians in terms of the relevance of the disease.

Results: This is a report of successful management of a patient with severe DCM, who was admitted at the first time with congestive heart failure IV (NYHA), severe multiple valvular insufficiencies, which after 3 weeks of conservative treatment was compensated till CHF III (NYHA). After undergoing a successful heart surgery with aortic and mitral valve prostheses has returned to normal life.

Conclusions: The outlook for patients with cardiac failure has improved substantially in the last 15 years. This is largely due to the application of the results of multicentre clinical trials of new and older

drugs and a better understanding of outcomes for individual patients. The following case study has been chosen to illustrate the basis for therapeutic management of congestive heart failure. Critical to the success of heart failure management is the discharge planning process and follow-up in the outpatient setting.

Keywords: Dilated cardiomyopathy, cardiac failure

27. HYPERPROLACTINEMIA: ETIOLOGICAL, CLINICAL AND DIAGNOSTIC ASPECTS

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Introduction: Hyperprolactinemia (HPRL) is the most common hypothalamo-pituitary disorder encountered in the endocrine practice. The HPRL affect reproductive and sexual function in males and females. In most cases it is caused by a pituitary adenoma that very rare, but can progress to malignancy. Studies have shown that in patients with HPRL the risk of cancer in generally increase, and rather increase the incidence of the breast cancer in women and prostate cancer in men.

Purpose of the study: To assess the causes, the clinical and laboratory characteristics of HPRL in patients hospitalized in the Republican Hospital between 2009 and 2012.

Materials and Methods: It is a retrospective epidemiological study, for that, were used descriptive methods, following the distribution of the number of cases based on different parameters. The study includes 52 observation forms of patients with HPRL based on clinical examination, radio-imaging and serological values of hormones.

Results: The study included 52 patients of whom 43 were women and 9 men. In the total group of patients, HPRL is caused by prolactinoma in 20 patients, in 17 patients by primary hypothyroidism, mixed pituitary adenoma (prolactin (PRL) and GH secreting) in 6 patients, and diffuse toxic goiter in 4 patients, 2 patients with the extra-sellar tumor, 2 with empty sella syndrome and 1 patient with drug induced HPRL.

In patients with increased slightly values of PRL, up to 50 ng / ml, clinical manifestations are less pronounced: oligomenorrhea was found in 22.22%, amenorrhea and galactorrhea- in 18.51% and infertility- in 3.7% only. When PRL values represent more than 100ng/ml, characteristic symptoms of HPRL are more obvious: so 57.14% of women manifested amenorrhea and galactorrhea in 42.3%, infertility – in 42.7%; in 14.28% of men was present gynecomastia and in 42.7% was complained low libido.

The results of the hormonal profile reflect etiological aspects of HPRL. So that, in patients with mixed adenoma, besides elevated value of PRL, is increased growth hormone (STH- 35.25±15.87 mU/L), in patients with primary hypothyroidism is increased TSH- 40.23±8.48mU/L. In patients with extra-sellar tumor, there is a decrease of gonadotropin hormones, FSH- 0.75±0.05 mU/L and LH-0.6±0 mU/L.

Conclusions: The tumoral cause is predominant in HPRL etiology representing 53.84%. Specific clinical features of HPRL are more obvious when values of PRL record more 100ng/ml. The changes in hormonal profile are determined by etiology of hyperprolactinemia.

Keywords: Hyperprolactinemia, galactorrhea, amenorrhea, prolactinoma

28. THE CORRELATION BETWEEN CORONARY STENT'S LENGTH AND IN-STENT RESTENOSIS

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Actuality: In-stent restenosis (ISR) is considered most important complication of the *percutaneous transluminal coronary angioplasty* (PTCA). For a period of six months, the prognosis of PTCA varies in dependence of what method is used: it occurs in over 45-50% of cases after balloon angioplasty, in 10-15% after the use of bare metal stents (BMS) the result being better and below 10% after the use of drug eluting stents (DES).

The aim: To elucidate the impact of coronary stent's length in ISR occurrence in patients with various forms of IHD, after a 6 months follow-up.

Material and Methods: In this study were involved 150 patients. According to the stent's length, the group was divided into 2 subgroups: group I - subgroup I -- that of "long" stents (>20mm) – 64 patients and subgroup II – that of "short" stents (\leq 20mm) – 86 patients. Patients underwent clinical supervision for a period of 6 months.

Results: In order to solve these lesions in the patient's groups were used several models of BMS. In both groups the model "Driver/Integrity" was used more often – 44.2% in group I and 39.1% in group II. On the second stage were placed "Vision" stents model which were used in 33.7% cases of the "short stents" group and in 35.9% cases of the "long stents" group. "Liberte" were used in the treatment of 22.1% patients from the Ist group and of 25% patients from the IInd group. After a 6 month follow-up IRS confirmed angiographically had 10.5% patients in whose treatment were used "short" BMS and 20.3% patients in whom were implanted "long" BMS, while in 8.1% patients the Ist group and 15.6% in the IInd group were diagnosed new injuries, due to this fact they suffered repeated angioplasty procedures, the obvious differences being statistically relevant one – $p < 0.05$. The lumen loss index was more important for long stents – 2.54 vs. 2.33mm ($p < 0.05$).

Conclusions:

1. Bare metal stents whose length is \leq 20mm have a favourable prognosis at a 6 month distance compared to those >20mm, in-stent restenosis rate in this period was 10.5% for short stents and 20.3% for those long.

2. It is necessary to choose an optimal length by using bare metal stents – so that the stent's borders not to exceed long away the coronary lesion, but for cases that require the use of stents >20mm is more beneficial to use drug eluting stents.

3. It is advisable to avoid the use of bare metal stents in the treatment of coronary lesions with those lengths more than 20mm, in these cases drug eluting stents are of choice, while in the coronarian lesions with their length \leq 20mm treatment, bare metal stents can be used widely.

Keywords: Coronary stent, in-stent restenosis, angioplasty

29. PHOSPHORUS AND CALCIUM IMBALANCES IN DIABETIC NEPHROPATHY

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Introduction: It was performed a clinical study on phosphorus and calcium imbalances in diabetic nephropathy. Diabetic nephropathy is a pathology that affects the renal function. Phosphocalcic metabolism is closely related to this process. Disorders include the increase of serum phosphorus level and decrease of the serum calcium level. Disorders in mineral and bone metabolism in diabetic nephropathy are associated with high morbidity and mortality.

Purpose and objectives: To study clinical and paraclinical indicators and identify the metabolic changes of calcium and phosphorus according to glomerular filtration rate (GFR) in diabetic nephropathy.

Materials and Methods: Case histories of patients treated in the Department of Endocrinology of the SCR during 2012-2014. We have evaluated 360 clinical review charts, 91 of them were selected for this clinical study. The study results were obtained by statistical processing, with analysis of statistical veracity indices.

Results: We found a direct correlation between GFR and serum calcium level and an inverse correlation between GFR and duration of diabetes, diastolic blood pressure, serum phosphorus, cholesterol, triglycerides, LDL and creatinine in study groups.

Conclusions: (1) With the decline of GFR there is a decrease of the serum concentration of calcium. (2) With decrease of GFR in diabetic nephropathy the serum concentration of phosphorus increase.

Keywords: Diabetic nephropathy, glomerular filtration rate, Calcium, Phosphorus

30. FREQUENCY OF MANAGEMENT ASSOCIATION OF RHYTHM AND CONDUCTIVITY DISORDERS AT STENOCARDIA PATIENTS

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Actuality: Angina pectoris is the principal syndrome of ischemic heart disease, angina pain occurring when oxygen delivery is inadequate for myocardial requirement, commonly associated with heart arrhythmias. Rising incidence of sudden cardiac death associated with arrhythmias, especially those with evolution trend, determine their medical and social importance. By their complexity, arrhythmias can generate a change of heart rate, establishment of contractility and coronary flow disorders, leading to significant hemodynamic disturbances with significant impact on body haemostasis. At the modern stage in the focus of researchers remain the mechanisms start and development of arrhythmias and strategies of its therapeutic management.

Materials and Methods: The study was conducted at the Department of Internal Medicine – Semiology, SMPHU "Nicolae Testemitanu". In the study, we included patients with the diagnosis of stable angina pectoris. General evaluation included sex, age of patients at the onset of disease, anamnesis, clinical manifestation of the disease, physical examination and paraclinic (laboratory and instrumental) research. Rhythm and conductivity disorders were based on electrocardiogram (ECG) in 12 standard lead. 60 patients with angina pectoris were examined, divided into 2 groups: the first group included people with rhythm and conductivity disorders and the second one – without these kinds of disorders. The account between women and men was 2:1, aged between 41-60 years (60.3 ± 3.15). In the next step we have analyzed the obtained indications by statistical methods and compared the results between the two groups.

Results and Discussion: In this section of their clinical and laboratory research on the 60 patients with angina pectoris associated with arrhythmias we have examined sexual identity, the average age of patients and illness duration. The arrhythmias analysis has discovered the presence of atrial fibrillation in 18 cases (60%), atrial flutter in 3 cases (10%) and conductivity disturbances in 22 of them (73%). Left bundle branch blocks were in 2 times more common than right bundle branch blocks: 8 (27%) and 4 (13%) patients respectively.

Sinus bradycardia, sinus tachycardia, extrasystole were less common. Arrhythmia analysis by sex showed no statistically significant differences.

Comparing the study groups in terms of clinical manifestations observed a predominance of breathlessness severity and heart pain in the group of patients with heart rhythm and conductivity disorders with a greater severity of angina pectoris (c.f. III -IV) in the group with rhythm and conductivity disorders compared to angina pectoris (c.f. II -III) in the group without rhythm disorders.

Conclusions: Among the rhythm and conductivity disorders associated with angina pectoris the most common are atrial fibrillation and left bundle-branch block.

The association between rhythm and conductivity disorders and angina pectoris involves a greater severity of disease and specific tactics of treatment.

Keywords: rhythm disorders, ischemic heart disease

31. THE MECHANISM FOR CONSIDERING FEMALE SEX AS A FACTOR FOR DEVELOPING THROMBOEMBOLIC STROKE IN ATRIAL FIBRILLATION

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Introduction: Women with AF are at a higher overall risk for thromboembolic stroke when compared to men with AF. Recent evidence suggests that female sex, after adjusting for stroke risk profile and sex differences in utilization of anticoagulation, is an independent stroke risk factor in AF. Underutilization or inadequate oral anticoagulation in women could potentially explain part of

these sex-differences in stroke risk. However, a more recent study found a persistently higher risk of stroke among women as compared to men despite similar warfarin adherence rates.

Objective: To describe the potential mechanisms behind the increased risk of stroke in AF associated with female sex.

Materials and Methods: General mechanisms of thromboembolism in AF – Rudolf Virchow postulated that thrombosis arises from three co-existing phenomena: abnormalities in the vessel wall, blood stasis, and a hypercoagulable state. Virchow's triad can be applied to thrombogenicity in AF. Structural changes in the left atrium (LA) and left atrial appendage (LAA), blood stasis induced by left atrial dilatation and inhibited forward flow contributes to thrombus formation in patients with and without AF. As a consequence of structural and blood flow changes, prothrombotic conditions develop with activation of coagulation proteins.

Potential mechanisms for higher stroke risk in women with AF Hormone therapy and menopause – the risk for ischemic stroke in women doubles between the ages of 55 and 65, the menopausal transition period during which estradiol levels decrease by about 60%. Endogenous estrogen has favorable outcomes on lipid metabolism, coagulation and vascular tone, and even incident AF. In a meta-analysis of seven major randomized trials analyzing hormone therapy (HT) reported an increased risk of stroke in both combination HT trials and estrogen-only trials.

Conclusion: Sex-related differences in the vasculature and myocardial structure may predispose to alterations in blood flow, shear stress, and altered endothelial function. Further, there is evidence suggesting a potential sex-based increase (especially in the post-menopausal state) in systemic inflammatory and procoagulant markers, thrombogenic particles and platelet aggregation, all of which contribute to a prothrombotic circumstance. Observational data suggest sex-based differences in stroke outcomes are related to differences in stroke risk factor profile and management, in addition to underutilization of anticoagulant therapy in women. However, recent study results demonstrate an increased stroke risk in women despite baseline anticoagulant use.

Keywords: Atrial fibrillation, female sex, thromboembolic stroke

32. ASSOCIATION BETWEEN CARDIAC AUTONOMIC NEUROPATHY AND PERIPHERAL NEUROPATHY IN DIABETES MELLITUS TYPE 1

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Introduction: Cardiovascular autonomic neuropathy (CAN) is defined as the impairment of autonomic control of the cardiovascular system. The prevalence of CAN varies widely from 2.5 to 50%. Neural damage by chronic hyperglycaemia, vascular insufficiency in the vessels supplying the nerves, and autoimmune mechanisms have been suggested as possible causes of CAN, its pathogenesis remains poorly understood. As in the case of diabetic peripheral neuropathies (DPN), disease duration and long-term poor glycaemic control are important risk factors for the development of CAN.

Purpose and Objectives: Evaluation of the correlation between CAN and peripheral neuropathy in type 1 diabetes (T1DM).

Materials and Methods: In study were included 27 patients (10 men and 17 women) with T1DM and CAN (the diagnosis of CAN was established on the basis of changes in heart rate and blood pressure, during cardiovascular reflex tests, Ewing's battery). According to the total score of the CAN severity, patients were divided in 3 groups. Were evaluated: T1DM duration and severity of peripheral neuropathy.

Results: The 1st group included 11 patients (40.7%) with mild CAN, which were discovered DPN mild – 6 patients (22.2%), DPN moderate – 5 patients (18.5%). T1DM average duration was 5.5±2.0 years. After analysis by the statistical method MedCalc 12.7.2 we detect significant correlation with mild DPN ($r=0.645$, $p=0.0003$).

The 2nd group was made by 8 patients (29.6%) with moderate CAN, which were observed the

presence of DPN moderate – 6 patients (22.2%) and DPN severe – 2 patients (7.4%). In this group the T1DM average duration was 13.6 ± 5.5 years. Important correlation with moderate DPN ($r=0.452$, $p=0.017$).

In the 3rd group were added 8 patients (29.6%) with severe CAN, which had severe DPN. The average duration of T1DM was 18.9 ± 7.6 years. In this group were observed more significant correlation with duration of T1DM ($r=0.585$, $p=0.0013$) and severe DPN ($r=0.846$, $p<0.0001$).

Conclusions:

1. Cardiac autonomic neuropathy severity correlates with peripheral neuropathy severity in type 1 diabetes.

2. Cardiac autonomic neuropathy and peripheral neuropathy severity increases with the duration of type 1 diabetes.

Keywords: Cardiac autonomic neuropathy, diabetes type 1, peripheral neuropathy

33. SERUM LIPID PROFILES IN PATIENTS WITH METABOLIC SYNDROME WITH OR WITHOUT CORONARY ARTERY DISEASE

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The purpose of study: To assess serum lipid profiles in patients with metabolic syndrome (MS) and stable angina pectoris (SAP) vs. patients with MS without SAP.

Material and methods: This study included 122 patients with metabolic syndrome (mean age 54.06 ± 0.86 years). The diagnosis of MS was established according to criteria proposed by IDF and AHA/NHLBT in 2009. All patients with MS and clinical signs of SAP undergo bicycle exercise stress test (EST), unless contraindicated. Depending on EST results, there were selected 66 (54.09%) patients with SAP and positive EST (group I) and 56 (45.9%) patients with negative EST (group II, control). Following evaluation included laboratory investigations: total cholesterol (TC), LDL cholesterol (LDL-C), HDL cholesterol (HDL-C), triglycerides (TG) and TC/HDL-C ratio ≥ 4.2 in both groups.

Results: Lipid profile assessment revealed that the mean value of TC for patients in group I was 5.63 ± 0.14 mmol/l vs. 5.42 ± 0.15 mmol/l for patients in group II ($p>0.05$). The mean LDL-C in group I patients was 3.46 ± 0.11 mmol/l vs. 3.25 ± 0.13 mmol/l in group II patients ($p<0.05$). In group I patients we estimate a mean HDL-C value of 1.23 ± 0.04 mmol/l vs. 1.27 ± 0.04 mmol/l in group II patients ($p>0.05$). As for TG findings, the average value was 2.22 ± 0.1 mmol/l in group I patients vs. 1.95 ± 0.13 mmol/l in group II patients ($p>0.05$). When considering the frequency of dyslipidemia, we found TC values ≥ 4.5 mmol/l in 59 patients (95.16 %) from group I vs. 46 patients (82.14%) from group II ($p<0.05$). Values of LDL-C ≥ 2.5 mmol/l were found in 48 patients (87.27%) from group I vs. 44 patients (78.57%) from group II ($p>0.05$). Analysis of TG levels ≥ 1.7 mmol/l revealed significant higher rates of hypertriglyceridemia in group I patients (82.26%, $n=51$) vs. group II patients (48.21 %, $n=27$) ($p<0.001$). HDL-C assessment demonstrated values <1.0 mmol/l in men and <1.3 mmol/l in women in 22 patients (36.02%) with MS and SAP and 28 patients (50.0%), MS without SAP ($p>0.05$). Also an increased atherogenic index, as determined by the ratio of TC / HDL-C, was proven in both groups (group I - 4.7 ± 0.17 vs. group II - 4.3 ± 0.12 , $p>0.05$). In group I we determined values of TC/HDL-C ratio ≥ 4.2 in 36 patients (58.06%) vs. 23 patients (41.07%) in group II ($p>0.05$).

Conclusion: In both groups of patients we determined abnormal lipid profiles. To be also mentioned the presence of a larger number of patients with TC and TG values exceeding the allowable limits in the group with metabolic syndrome and stable angina pectoris.

Key words: lipid profile, metabolic syndrome, coronary artery disease

34. DRESSLER'S SYNDROME AFTER MYOCARDIAL INFARCTION

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Introduction: Dressler's syndrome is a secondary form of pericarditis following myocardial infarction (MI) or postsurgical injury of the pericardium. It presents with fever, pleuritic pain and pericardial effusion between 2 weeks to several months after MI, and is affecting 1-5% of patients.

Case Report: A 37-year-old male presented to the emergency room (ER) with acute chest pain, accompanied by general weakness after 18 hours from onset of symptoms. Cardiac risk factors included hypertension, smoking, dyslipidemia and a family history of coronary artery disease. The ECG was consistent with an acute inferior ST-segment elevation MI. Despite the late presentation, he was taken to the catheterization lab because of his ongoing pain and persistent ST elevation. Coronary angiography revealed proximal circumflex artery occlusion. Target lesion angioplasty was performed and a bare metal stent (INTEGRITY 3.5×15 mm) was implanted, obtaining a successful opening of the artery with a TIMI 3 flow. Following loading doses of aspirin and Clopidogrel in the ER, the treatment continued with Metoprolol, Zofenopril, Atorvastatin and Heparin. Level of troponin I was elevated to 166.23 µg/l. Transthoracic echocardiogram (EcoCG) showed akinesis of the inferior, posterior and lateral walls of the left ventricle (LV) from the base to the apex with a reduced systolic function (EF 35%) and no pericardial effusion. His inpatient stay was complicated by pyrexia, raised inflammatory markers (CRP 239.72 mg/l) and a negative chest X-ray dynamic with worsening venous stasis to grade 2, focal infiltration in the right 7th and 8th segments and minimal amount of pleural fluid. A right lung lower and middle lobes pneumonia was diagnosed and antibacterial therapy (Ampicillin/Sulbactam 1.5 g × 4 times/day) was added. Further laboratory findings revealed mild anemia, leukocytosis, raised inflammatory and liver markers. Sputum culture was negative. Two weeks after admission, despite antibiotic therapy, the patient continued to have fever, dyspnea, dry cough and pleuritic pain. EcoCG examination showed progressive pericardial effusion with no visible mechanical defects. Subsequent cardiac magnetic resonance revealed pericardial effusion of heterogeneous fluid: LV lateral wall 28 mm, inferior wall 22 mm, anterior wall 27 mm, right ventricle lateral wall 20 mm, left atrium 30 mm, right atrium 24 mm, with its systolic collapse. Pericardiocentesis for decompression was not performed because of no clinical signs of hemodynamic compromise. In the absence of sufficient data for a “hidden” cardiac rupture and the presence of rich pericardial fluid accumulation, a diagnosis of Dressler's syndrome was considered, and a glucocorticoid therapy with Prednisolone 1 mg/kg/day was initiated. Because of persistent inflammatory indicators, antibacterial treatment was changed to Piperacillin/Tazobactam 4.5 g × 4 times/day. During the next few days on treatment patients' fever subsided, cough and dyspnea were reduced. Heart rate normalized to 74 beats/min and blood pressure was 120/70 mmHg. Auscultation revealed vesicular breathing in the lungs, without rales. A prednisolone dose reduction to 5 mg/week was recommended to be continued after discharge. One month later the patient presented to the hospital for reevaluation and he had no recurrence of pericardial symptoms and a repeated EcoCG showed no pericardial effusion.

Keywords: Dressler syndrome, myocardial infarction

35. SCORAD INDEX EVOLUTION IN CHILDREN WITH ATOPIC DERMATITIS

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Introduction: Atopic dermatitis (AD) is a chronic inflammatory disease of the skin conditioned mostly by IgE allergic reactions genetic associated with atopy. It was proven that AD clinic evolution has some particularities related to the age, the severity of process and disease's duration. The severity of the disease is appreciated by SCORAD index assessment (scoring atopic dermatitis).

Objective: SCORAD index assessment in AD clinical evolution in children.

Materials and methods: The study group consisted of 30 patients with AD (10 males, 20 females) with the age range between 2 months and 14 years. The diagnosis was based on patients' history, clinical and laboratory investigations. The dynamic of SCORAD index, total Ig E, CIC were assessed. SCORAD index was calculated in points, includes the evaluation of the process progression (affected area), the intensity of skin manifestations (erythema, oedema/papules, moist/crusted areas, excoriations, lichenification, xerosis) and the accuracy of subjective signs (itching, sleep disturbances), thus reflects the gravity of the process. The patients were divided into 3 groups by SCORAD index: I group- 8 patients with the index points below 20 (mild form), II group- 12 patients with SCORAD index ranged between 20 and 30 (moderate form), III group- 10 patients with the index >30 pts. (severe form). AD therapy included: diet therapy, local treatment with specific remedies of daily skin care, local anti-inflammatory and antihistamines remedies. Therapeutic efficacy was based on SCORAD index further determination.

Results and discussions: The average SCORAD index for all the groups of study was 35,0 pts., in I group of study- 19,8 pts., II group-28,0 pts., III group-59,0 pts.. At the first reexamination in 7 days, average SCORAD index was 22,0 pts. (the index decreased with cca. 33%), after 12 days it consisted 10,4pts. (77% decreased from initial values). Xerosis extinction and clinical remission induction was noticed in 20 patients. In 10 patients (4 from II group and 6 from III group), a slow decreasing, till 30%, of the clinical signs was noticed. The individual analysis of these patients showed the presence of comorbidities (chronic amigdalitis, adenoiditis, gastroduodenitis), that needed prolonged further treatment.

Conclusion: This study sustains the efficiency of the SCORAD index's prediction value in AD evolution assessment. SCORAD index decreasing in the study group reflects the treatment's efficacy. The presence of digestive system's disturbances and of infections with focal chronic inflammation leads to a prolonged inflammatory dermic process and a prolonged therapy.

Keywords: SCORAD index, predictive value, atopic dermatitis

36. QUALITY OF LIFE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND PULMONARY INVOLVEMENT

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Introduction: The influence of systemic lupus erythematosus (SLE) on the quality of life (QoL) is an important principle in the management of patients with SLE.

Purpose and objectives: Evaluation of QoL in patients with SLE and pulmonary involvement.

Material and Methods: The study included a group of consecutive patients who meet the SLICC, 2012 criteria of SLE classification. The disease activity was assessed by SLEDAI and SLAM, organ damage – by SLICC Damage Index. Evaluation of lung involvement was performed by St. George Respiratory Questionnaire, imaging (Rx, ECHO, HRCT) and functional respiratory tests (spirometry, DLCO). QoL was assessed by the SF-36 questionnaire, which includes eight areas summed to Physical Component Summary (PCS) and Mental Component Summary (MCS). The correlation between variables was calculated by Pearson coefficient.

Results: The study enrolled 30 patients with mean age 42.3 ± 11.64 yrs. the disease duration 7.29 ± 7.1 yrs, mean age at onset – 34.43 ± 11.4 yrs, female:male ratio 9:1. The average of SLICC classification criteria was 6.2 ± 1.64 . The activity, assessed by SLEDAI was 12.33 ± 8.07 and by SLAM – 13.63 ± 6.41 points, respectively, SLICC DI was 2.13 ± 2.45 points. Thirteen (43.3%) patients had pulmonary implications: 6 with pleurisy, 3 – pulmonary hypertension, 1 – shrinking lung syndrome, 1 – interstitial pneumopathy, 1 – pulmonary embolism and 1 – lupus pneumonitis. The comparative analysis of patients with and without lung disease showed a decrease in the quality of life in both groups. In the group of patients with pulmonary involvement was obtained a lower summary score of physical

component (31.6 vs 36.4) and a higher score of mental component (39.0 vs 36.5) compared with patients without lung involvement. Correlation analysis between QoL in patients with lung disease showed a negative, moderate correlation between the PCS and the disease activity SLAM ($r = -0.69$, $p < 0.05$) and SLEDAI ($r = -0.56$, $p < 0.05$), while the MCS had a weak negative correlation with SLEDAI ($r = -0.33$, $p < 0.05$) and did not correlate with SLAM. In patients without lung disease, was identified a weak negative relationship between SLAM and PCS ($r = 0.40$, $p < 0.05$). Simultaneously, was established an inverse correlation between the PCS and the organ damage index (SLICC DI) in both groups ($r = -0.52$, $p < 0.05$) and in patients without lung injury also with MCS ($r = -0.38$, $p < 0.05$).

Conclusion: In patients with SLE was found a diminished QoL. In the group with pulmonary involvement was established a reduced physical component score, which correlated inversely with disease activity. In patients without pulmonary involvement, the QoL was reduced also, with an inverse moderate correlation with SLICC DI and a less significant correlation with disease activity.

Keywords: Systemic lupus erythematosus, Quality of Life

37. CORRELATION BETWEEN PAIN, FUNCTIONAL DISABILITY AND DISEASE ACTIVITY IN PSORIATIC ARTHRITIS PATIENTS WITH AXIAL INVOLVEMENT

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Summary: Psoriatic arthritis is an inflammatory arthritis that is associated with psoriasis. Early objectification joint pathology and conditioning treatment, slows progression of the disease and its unfavorable prognosis. Clinicians pay great attention to psoriatic arthritis, which is motivated by certain tendencies within global growth over the past three decades between 0.3 - 1% in population in general. The aim of this research was to assessment the correlation between pain intensity, functional disability and disease activity in psoriatic arthritis (PsA) patients with axial involvement. There were examined 47 patients suffering from psoriatic arthritis, with average age of 43.8 ± 1.6 years.

Material and Methods: The study included a cohort of patients selected according to the ASAS criteria for PsA. The pain intensity was assessed by Visual Analog Scale (VAS) for pain. The disease activity was estimated using the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), and the functional disability was evaluated by Bath Ankylosing Spondylitis Functional Index (BASFI)

Results: We studied 47 patients, 44.1% females with mean age of \pm SD 43.8 ± 1.6 years, and disease duration of \pm SD 11.0 ± 1.2 years. The pain intensity by VAS and functional disability by BASFI was 6.7 ± 2.4 and respectively 5.4 ± 1.2 points. The disease activity was estimated at 5.7 ± 0.8 points, being appreciated as moderate-severe.

| | | BASDAI | BASFI | VAS |
|--------|-------------------------|----------|----------|----------|
| BASDAI | Correlation Coefficient | | 0,844 | 0,807 |
| | Significance Level p | | < 0,0001 | < 0,0001 |
| BASFI | Correlation Coefficient | 0,844 | | 0,650 |
| | Significance Level p | < 0,0001 | | < 0,0001 |
| VAS | Correlation Coefficient | 0,807 | 0,650 | |
| | Significance Level p | < 0,0001 | < 0,0001 | |

Was established a strong significance positive correlation between VAS and BASDAI ($p < 0.0001$), BASDAI and BASFI ($p < 0.0001$). The VAS and BASFI had a moderate positive interdependence, as shown in the table.

Conclusion: The Pain Intensity and Functional Disability Index have a high significance positive correlation with the disease activity while between VAS and BASFI was revealed a moderate positive correlation in psoriatic arthritis patients with axial involvement.

Key words: axial disease, disease activity, functional disability

38. PARTICULARITIES OF PULMONARY INVOLVEMENT IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Introduction: Respiratory involvement in systemic lupus erythematosus (SLE) is not as well-known as the cutaneous and renal manifestations. It occurs frequently, but the diagnosis may be difficult because of the heterogeneity of the anatomical and clinical presentations.

The pathophysiology of SLE involves genetic, endocrine, environmental, pharmacological and immunological factors with hyperactivity of B lymphocytes and a cytotoxic reaction of auto-antibodies, activation of complement and circulating immune complex deposition.

Pulmonary manifestations of SLE can involve the pleura, lung parenchyma, airways, pulmonary vasculature and respiratory muscles. Pleuro-pulmonary manifestations are present in almost half of the patients during the disease course and may be the presenting symptoms in 4-5% of patients with SLE.

Purpose and Objectives: To analyze the incidence, clinical features and General Well Being (GWB) in patients with systemic lupus erythematosus (SLE) and pleuro-pulmonary involvement.

Materials and Methods: A descriptive study of 30 SLE patients, aged 44.5 ± 12.6 , was recruited from Cardiology Institute between 2013 and 2014. All patients were evaluated clinically and laboratory tests were done. To assess pulmonary involvement, were performed chest X-ray, spirometry, DLCO and High Resolution CT scan of thorax.

Results: Pleuropulmonary manifestations, were diagnosed in fourteen (46.7%) SLE patients. Among them 10 (71.4%) were symptomatic and had complaints of dyspnoea, cough, pleuritic chest pain and some of them history of hemoptysis. At radiological assessment, pleural effusion was found in 29% of cases, in 7% - lupus pneumonitis, in 7% pulmonary artery hypertension (PAH) and in 7% Shrinking Lung Syndrome (SLS). Interstitial lung disease (ILD) was found in 50% of cases. In 4 (28.6%) asymptomatic patients, chest radiographs and CT scan of thorax showed unilateral or bilateral patchy areas of consolidation, predominantly in the lung bases, which in two cases was associated with pleural effusion or atelectasis. Screening test for lung function, by spirometry, found abnormality in 14 (46.6%) cases and restrictive change was the major abnormality 7 (23.3%). The level of severe stress, in patients with lung involvement, assessed by GWB was – 8 patients (57.14%) versus those without – 6 patients (37.5%).

Conclusion: Commonest respiratory symptom was dyspnoea 8 patients (57.14%) and commonest respiratory manifestation was interstitial lung disease 50% and pleural effusion 29%. Patients with pulmonary disease have a higher degree of distress than those without.

Keywords: Systemic Lupus Erythematosus, pulmonary involvement, clinical features

39. CHARACTERISTICS OF ARRHYTHMIAS IN AORTIC VALVE DISEASE

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Introduction: Aortic valve disease and arrhythmias are two conditions associated with increased cardiovascular morbidity and mortality. Aortic valve disease is often associated with atrial fibrillation the prevalence of which is estimated at 0.4% in general population. A thromboembolic complication in valvular-atrial fibrillation is of 17.5% and in the nonvalvular is about 5% annually.

Purpose and objectives: Estimating the characteristics of arrhythmias in aortic valve disease.

Material and Methods: The study included 56 patients with aortic valve disease, hospitalized

in the Cardiology Department Nb. 4 of the Cardiological Institute, including 35 patients with aortic stenosis (SA) and 21 - with aortic regurgitation (RA). The procedure included the estimation of clinical and paraclinical parameters. For statistical processing of data were applied to the set of programs Microsoft Excel and "t" test - Student.

Results: From the history of patients we found degenerative etiology present in 25 (44.63%) patients, rheumatic - 22 (39.29%), endocarditis - 5 (8.92%), congenital (bicuspid) - 3 (5.35%) and Marfan syndrome in only 1 (1.78%) case. Distribution of patients by performing electrocardiographic route mentioned the presence of arrhythmias in 56 (100%) patients and conduction disorders in 41 (73.21%) cases. The most frequent alteration of rhythm in both study groups was the atrial fibrillation in 18 (51.43%) cases of SA and 5 (23.81%) of RA. Ventricular ectopic beats were ranked second in the group with SA - 11 (31.42%) of patients, whereas in the group with RA joined the rarest - 2 (9.5%). Atrial extrasystoles were noted with a higher preponderance in RA - 5 (23.81%) patients than in SA - 2 (5.71%). Atrial flutter in patients with RA prevailed with 4 (19.04%) of cases, and in those with SA - only 2 (5.71%) of cases.

Conclusion: The study of features of arrhythmias in aortic valve disease has predominantly established the degenerative etiology. It was observed the prevalence of atrial fibrillation, both in patients with aortic stenosis, as well as in those with aortic regurgitation.

Keywords: Arrhythmias, aortic stenosis, aortic regurgitation

40. METABOLIC SYNDROME AND HYPERURICEMIA

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Introduction: Metabolic syndrome comprises several abnormalities that occur together: general or central adiposity, elevated blood pressure, dyslipidemia, and hyperglycemia. In addition, several other abnormalities including those of fibrinolysis, thrombosis, inflammation, and endothelial function are strongly related to the syndrome. Elevated serum uric acid levels are commonly seen in association with glucose intolerance, hypertension, and dyslipidemia. Accumulated evidence have also demonstrated that serum levels of uric acid have a significant correlation with obesity and complications of metabolic syndrome.

Materials and methods: In our study were selected about 200 patients with grade 1 and 2 hypertension aged up to 65 years. The diagnosis of metabolic syndrome was established according to the proposed criteria based on WHO recommendations (1998), NCEP / ATP III (2005) and IDF (2005). We evaluated uric acid levels and hyperuricemia in patients with MS.

Results: In researched group was established a significant prevalence (57.7%) of hyperuricemia in patients with metabolic syndrome. It was noted a proportional correlation of hyperuricemia and insulin resistance with increasing obesity degree. The same tendency was noted to the mean plasma levels of uric acid in patients with metabolic syndrome. In patients with hyperuricemia average values of the atherogenic lipid fractions (TC, TG, LDL-C) were significantly higher than in those with normouricemia and the corresponding values of HDL-C were lower, while the TC and LDL-C levels in patients with hyperuricemia exceeded the normative recommended by NCEP. It was also noted that in the group of persons with hyperuricemia, hypertriglyceridemia met 2.79 times more frequently than in individuals with normal levels of uric acid and the probability of hypertriglyceridemia in the presence of hyperuricemia was almost 3.21 times higher.

Conclusion: Hyperuricemia, considered an index of metabolic disorders, was noted in 57.8% of metabolic syndrome patients and significantly correlated with the values of lipid indices (TG, LDL-cholesterol), basal glucose levels, blood pressure values and indices of obesity (body mass index and waist circumference).

Keywords: Metabolic syndrome, hyperuricemia

41. THE ROLE OF KINETOTHERAPY IN PATIENTS WITH RHEUMATIC HEART DISEASE

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Introduction: Rheumatic heart disease presents further an increased mortality, although their prevalence in industrialized countries decreases. However, remains a current topic for the economically less developed regions with the ineffectiveness of preventive methods applied to microbial agents. European guidelines dedicated to the management of patients with rheumatic heart disease are limited to recommendations regarding patient education, disease prevention and behavior, and recommendations to anticoagulant therapy.

Purpose and Objectives: Estimation and evaluation of therapeutic efficacy of kinetotherapy in the complex treatment of patients with rheumatic heart disease.

Materials and methods: Our study is based on 61 patients with rheumatic heart disease who were investigated in the complex by tools objectification: oxygen saturation, PSQIII general satisfaction, global assessment by the patient and physician PGA / MDGA, were treated and trained. Only 38 of them received physical therapy.

Results: Our study relieved the predominance of women in 68.8%, mean age 54.6 years, 61% was noticed varying degrees of obesity, half of the patients present different degree of disability and only 5 patients are capable to working. Clinical dates attest different stages of dyspnea (100%), palpitations followed by 72.13% and 57.37% with fatigue. At baseline, heart failure prevalent NYHA class III according to 64% and finally the 40% grade III and 42% grade II. The patients from the study with kinetotherapy appropriated necessary methods like (descending abdominal breathing / chest and climbing stairs, restoring elements of breath), and training self-management of the disease. We evaluated the efficacy of complex treatment in combination with kinetotherapy in patients with rheumatic heart disease and we proved the superiority versus no kinetotherapy, translated by reducing the degree of dyspnea 100%, global assessment of disease by the patient 34.2 mm and physician 33.5 mm. Analysis of overall satisfaction by PSQIII caused an elevated issues and interpersonal communication, time spent with the doctor from the average values in the population, but financial problem persist.

Conclusion: Patients who received kinetotherapy prove the increased level of general satisfaction, the decrease of global assessment by patient and the increase of the compliance to the received treatment versus those without kinetotherapy demonstrated by functional methods.

Keywords: Rheumatic heart disease, kinetotherapy

42. ACUTE AND CHRONIC TREATMENT OF PANCREATITIS IN CHILDREN

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Introduction: In the structure of chronic diseases in children one of the first place takes the pathology of the digestive organs, one of which consist the pancreas gland disease incidence is increasing in all age groups. Treatment consists of a suppression effect of the pancreatic enzymes by administering antienzymes, preventing infection (with antibiotics and reduce inflammation). It is administered selective spasmolytic: Duspatalin, Buscopan or Spasmomen, administered at least 2-3 weeks in pancreatitis. Antibiotics are administered in cases of toxic syndrome with fever, signs of inflammation in blood test and in pancreas damage in association with respiratory diseases (acute bronchitis, pneumonia). Proton pump inhibitors: Omeprazole, Lansoprazole. Antacids, Maalox (dose depending on the age) x 3 times a day. Infusion therapy - S.5 % -10 % glucose, 0.9 % s.NaCl, s. Ringer. Fluids intravenous (i.v) is given for purposes of detoxification and hydro-electrolytic rebalancing.

Purpose and objectives: Targeted full analysis of efficacy of the treatment administered to children with acute pancreatitis (AP) and chronic pancreatitis (CP) in the acute phase.

Materials and methods: 150 children were included with AP and CP, they were hospitalized in the pediatric gastroenterology department SCMC PMSI "V. Ignatenco" in 2010-2013. Group I includes 75 children with AP (basic group) and second group - 75 children with CP in acute phase (control group). The confirmation of positive diagnosis was based on criteria: Gastrointestinal anamnesis, physical examination, laboratory investigations, explorations instrumental: EGDS, transabdominal ultrasound of the digestive organs.

Results and discussion: From concurrent diagnoses was presented in patients with AP - ketoacidosis non-diabetic children- 48 (64 %) , dehydration of 23 children who constituted 30.6 % of cases, which confirms receiving treatment in children with AP perfuzional percentage greater compared to patients with CP in acute phase . Pathological signs in children with AP were more frequently Cacea, Meyo - Robson, AP in children - Mendel, Cacea, pain in the Saffar zone, Meyo - Robson. Malformation of the gallbladder was found to children with AP in 32 children (42.6%), but children with CP in acute phase of 28 children 37.3%. Concurrent diagnosis of chronic gastroduodenitis in acute phase was founded to children with CP in the acute phase-49 children (65.3%), but children with AP - 28 children (30.6%). It was found that patients with AP receiving infusion therapy (s. 5% glucose, 0.9% NaCl, Ringer) to 48 (64%) children, but children with CP in the acute phase to 29 children (38.6%) , antibiotic therapy has been indicated in 2/3 of the cases . PPI were administered to all children with AP and CP. The enzyme therapy was administered to all patients with AP and CP under the clinical and laboratory data of exocrine insufficiency syndrome. The administration of the indicated treatment contributed to healing children.

Conclusion: Basic preparations in the treatment of AP and CP are PPI, the enzyme therapy, diet therapy, infusion therapy. Accompanying diseases most common in children with AP and CP are congenital malformations of gallbladder, GERD, DGR, chronic gastroduodenitis in acute phase, ketoacidosis non-diabetic.

43. EFFECT OF LOW DOSE STATINS IN SECONDARY PREVENTION IN PATIENTS UNDERGOING PERCUTANEOUS CORONARY INTERVENTIONS

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Introduction: In addition to invasive coronary revascularization procedures (PCI) in the treatment of ischemic heart disease indication of a systemic therapy could prevent recurrent events. Treatment with statins significantly reduces long-term occurrence of major clinical cardiovascular events post-PCI. The initiation of statin treatment as early as possible and the maintenance of a good adherence to statin therapy would lead to a more favorable clinical course in post-PCI period. The aim of this study was to evaluate the effect of low dose statins on the incidence of cardiovascular events (myocardial infarction, stroke, recurrent angina and instent restenosis) in patients undergoing percutaneous coronary interventions with stent implantation.

Materials and methods: We conducted a retrospective study that included 95 patients after coronary angioplasty with stenting. According to statin therapy these patients were divided into two groups: 1st group - without statin treatment in post-PCI period (32 patients, mean age of 59 ± 1.53 years) and 2nd group – patients with statin treatment in post-PCI period (63 patients, mean age of 58 ± 1.09 years). 67.7% of patients in 2nd group received simvastatin (10-20 mg/d, the mean dose - 16.5 mg/d), 25.4% - atorvastatin (10-20 mg/d, the mean dose - 14.9 mg/d) and 6.9% - other statins (pravastatin, lovastatin, fluvastatin). The high percentage of patients that were not receiving statins is explained by low medication compliance. The incidence of cardiovascular events was assessed at 6.51 ± 0.15 months post-PCI.

Results: 12.5% patients in the no-statin group experienced at 6 months post-PCI a major adverse cardiovascular event (3 patients – stroke and 1 patient – acute myocardial infarction) vs. 0% patients in the statin group ($p < 0.05$). The incidence of cardiovascular *composite endpoint*, which included

myocardial infarction, stroke, progression of angina and repeat revascularization. also was higher in 1st group vs. 2nd group - 62.5% (20) vs. 38.1% (24), $p < 0.05$. Administration of low dose statins did not influence at 6 months post-PCI the need for repeat coronary angiography (18.6% (6) patients in 1st group vs. 15.9% (10) in 2nd group, $p > 0.05$), repeat revascularization (15.6% (5) vs. 15.6% (10), $p > 0.05$) and target lesion revascularization (12.5% (4) vs. 7.9% (5), $p > 0.05$). Clinical instent restenosis was determined in 12.5% (4) patients in the no-statin group and 7.9% (5) patients in the statin group ($p > 0.05$). In addition, there were no differences in total cholesterol (CT), HDL-cholesterol (HDL-C) and LDL-cholesterol (LDL-C) levels between these two groups, irrespective of statins treatment: 1st group – CT – 5.3 ± 0.21 mmol/l, HDL-C – 1.22 ± 0.03 mmol/l, LDL-C – 2.96 ± 0.16 mmol/l and 2nd group – CT – 5.44 ± 0.16 mmol/l, HDL-C – 1.26 ± 0.02 mmol/l, LDL-C – 3.19 ± 0.14 mmol/l ($p > 0.05$).

Conclusion: This study suggests that low dose statins have a favorable effect on clinical outcome in patients after percutaneous coronary interventions. Therefore statin therapy should be administered to all patients undergoing coronary interventional procedures.

Key words: Statins, percutaneous coronary intervention, dyslipidemia, major cardiovascular events

44. UTILIZING PARAMEDICS IN PRE HOSPITAL AND PATIENT CARE

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Introduction: The EMS system is a very known modality that rapidly evolved from 2nd half of 20th century, the rapid development was due to changes in drift of population to urbanized areas, usage of more motor vehicles and rapid growth in population. Nowadays exist two approaches toward administration of EMS one is by physicians while another is given by paramedics. To clarify paramedics are best defined as medical professionals who provide medical care at an advanced life support level in the pre-hospital environment, usually in an acute phase of illness or injury.

Purpose and Objectives: Highlighting the importance of transition of Emergency Medical Services in Moldova from physicians based system to paramedic based system in order to improve the quality of response to the emergency medical cases, decrease expenses in healthcare system in Moldova and to solve physician deficiency issue.

Materials and Methods: Our analysis of EMS systems worldwide has led us to an important conclusion that even though paramedics' education period and training courses are shorter (2-4 years) than that of physicians (approximately 12 years), their skills don't fall from that of physicians in pre hospital emergency care modality. As profession of paramedics developed and has become an university based training for theoretic knowledge and practical part on ambulances and medical simulation centers. Same EMS systems that provide pre hospital care by university educated paramedics exist in developed countries like, Ben-Gurion University of Negev in Israel, University of Washington Medical Center in USA, University of Greenwich in UK, and University of Tasmania in Australia. Systems that use physicians in providing pre hospital care are France, Germany, Russian Federation, and Republic of Moldova.

Results: In order to make a quality comparison of both professionals that work in those two different systems we analyzed 2 profound researches that evaluated their diagnostic and treatment skills. First research of American Heart Association (AHA) compared diagnostic abilities of paramedics and physicians in stroke patients and revealed that recognition of neurological deficits by ambulance paramedics using FAST shows good agreement with physician assessment. Second research of American journal of Emergency medicine showed that highly trained paramedics in an urban emergency medical services system can identify patients with STEMI as accurately as blinded physician reviewers.

Conclusion: In conclusion and in scope of current health problems and ongoing burden and load in financing and medical personnel quota deficiencies in many healthcare systems a transition to EMS system that is administered by paramedics can be very beneficial to healthcare system problems and

simultaneously keep provision of professional pre hospital medical treatment in underdeveloped countries. A transition to such system requires cooperation of many "players" and effort to bring this change in EMS provision, but in the long run it will bring a cure to ongoing problems in healthcare systems.

Key words: Paramedics, Physicians, EMS, Health care system

45. CLINICAL CASE: DEXTROCARDIA – DISEASE OR A NORM VARIATION

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Introduction: Dextrocardia is a rare clinical entity, with the location of the heart, and apex orientation to the right, with an incidence of 0.2-1%, and associated with situs inversus in 1/3 of the patients. In the absence of other structural modifications it presents no cardiovascular risk, the risk of coronary artery disease (CAD) being similar to that of the general population. Dextrocardia was first described by Fabricius H. in 1606, but situs inversus – by Severinus M. in 1643. It often associates with other congenital malformations (CM) -- single ventricle, ventricular septal defect, tricuspid atresia. Clinically, dextrocardia shows no manifestations, except when associated with severe CM. Its confirmation needs a standard ECG, with the electrodes placed on the right, and an EchoCG evaluation.

Clinical case. Patient B., 62 years, admitted in PMSI MCH „Holy Trinity”, Acute Myocardial Infarction (AMI) Department with the Diagnose: Ischaemic cardiopathy. Unstable Angina. Myocardial infarction (1991). NYHA II HF. Dextrocardia.

At onset it presents with constrictive retrosternal pain at little physical activity lasting 15 minutes, suppressed by 3 tablets of nitroglycerine and inspiratory dyspnea. From history, in 1991 the patient underwent an AMI. Regular treatment with β -blockers, diuretics, antiagregants. On physical examination: overall condition of medium severity; normal-colored skin; vesicular breath sounds; rhythmic heart sounds, HR-70 b/min, BP-130/80 mm/Hg; painless abdomen on palpation.

On standard ECG-microvoltage, heart electric axis(HEA)- right deviation, negative P wave, inverted T wave in D I and AVL, R wave decrease from V1 to V6. Right ECG: sinus rhythm, HR-60 b/min., normal HEA. Left ventricle(LV) hypertrophy. Antero-septal and apical LV post-infarction sequelae. EchoCG: Dextrocardia; ascending Aorta wall induration; moderate dilation of the LA, RA and LV; hypertrophy of the LV myocardium; adequate LV contractility (EF-57%); LV antero-septal hypokinesia and apical akinesia. Mild PHT. Abdominal USG: Situs inversus. Laboratory tests – no deviations. The patient received the following treatment: anticoagulants, antiplatelets, nitrates, β -blockers, statins, metabolic drugs.

Conclusion: Patient B., 62 years, with dextrocardia and myocardial infarction develops an unstable angina, with typical clinical signs. The patient is hospitalized, following treatment according to the clinical guidelines, with positive results. In the specialized literature, patients with dextrocardia, in the absence of CM, need no particular approach of CAD, which was also seen in the case above.

Keywords: Dextrocardia, situs inversus, coronary artery disease

46. STROKE AND CARDIOVASCULAR RISK FACTORS

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Introduction: According to world-heart-federation in the world each year about 15 million people suffer a stroke, of which more than a third die and one third remain disabled for life. AVC worldwide represents the second leading cause of disability, being preceded by dementia.

World-heart-federation also provides data such as stroke, globally rarely is encountered in persons aged less than 40 years and is the fifth leading cause of death for people aged between 15-59 years, and two due to persons over the age of 60 years.

Objective: In this study we tried to evaluate the trend of the risk factors and their effects in causing stroke.

Materials and Method: The study involved 50 hypertensive patients, including 11 diagnosed with stroke. Data were collected from records of clinical observation and discussions with patients.

Risk factors based on which the study was conducted are: hypertension, sex, age, hypercholesterolemia, smoking, diabetes, atrial fibrillation.

| Cardiovascular risk factors | Hypertension and stroke 11p. (22%) | Hypertension without stroke 39p. (88%) |
|-----------------------------|------------------------------------|----------------------------------------|
| Sex | | |
| Male | 45,5% (5) | 46,15% (18) |
| Female | 54,5% (6) | 53,84% (21) |
| Age | | |
| <40 years old | 9% (1) | 5,12% (2) |
| >40 years old | 91% (10) | 94,8% (37) |
| Dyslipidemia | 63,63% (7) | 35,89% (14) |
| Smoking | 63,63% (7) | 41,02% (16) |
| Diabetes | 18,18% (2) | 38,46% (15) |
| Stress | 27,27% (3) | 69,23 (27) |
| Atrial Fibrillation | 54,54% (6) | 33,3% (13) |

Our data show that smoking, diabetes, dyslipidemia, and atrial fibrillation are the risk factors for stroke.

| The risk factor's number | Hypertension and stroke 11p. (22%) | Hypertension without stroke 39p. (88%) |
|--------------------------------|------------------------------------|----------------------------------------|
| 0 cardiovascular risk factors | 0 | 0 |
| 1 cardiovascular risk factors | 0 | 33,33% (13pts.) |
| 2 cardiovascular risk factors | 36,36% (4pts.) | 27,77% (10pts) |
| >3 cardiovascular risk factors | 63,63% (7pts.) | 41,02% (16pts) |

Data obtained elucidates that the number of cardiovascular risk factors increased risk for developing of stroke.

Discussion: We found that hypertension, smoking, diabetes and hypercholesterolemia as the most important factors in the occurrence of stroke.

Conclusion: Stroke is serious problem worldwide, including the multitude of risk factors that can cause it. So a large number of strokes can be prevented if the risk factors are known, if they are effectively monitored patients at risk and whether the treatment administered fighting appropriate risk factors.

Keywords: Stroke, hypertension, risk factors

47. CLINICAL CASE: INFERIOR MYOCARDIAL INFARCTION OF THE LEFT VENTRICLE, EXTENDED TO THE RIGHT VENTRICLE

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Introduction: Acute myocardial infarction of the right ventricle (AMI RV) is rarely met, it being associated with an inferior AMI of the left ventricle (AMI LV) in 33-50% of the cases, determining the increase of early morbidity and mortality. The symptoms of hypotension, clear pulmonary areas and turgid jugular veins are considered a marker of the RV lesion in patients with inferior AMI. Approximately 25-50% of AMI RV present with hemodynamic disturbances. Female

gender, age over 70 years, arterial hypertension, smoking, atrio-ventricular block and bundle branch block are predictive factors for the RV implication in patients with inferior AMI. The patient R., 72 years old, was admitted to the Cardiology Department nr. 1 of the PMSI Institute of Cardiology with the diagnosis: Ischaemic cardiopathy. Inferior acute myocardial infarction. Cardiac asthma accesses. Acute cardiac failure II Killip.

Complaints: Constrictive pain in the right parasternal and in the epigastric areas, inspiratory dyspnea at light physical effort, cardiac asthma accesses, calf swelling, fatigue.

History of the disease: The general state has been worsening for 2 weeks with epigastric pain, dyspnea progression, and apparition of cardiac asthma accesses. Ambulatory Echo-CG determined RV cardiomegaly, ejection fraction decrease (35%) and presence of akinetic areas. He was immediately hospitalized in the Cardiology Department of PMSI Institute of Cardiology.

Clinical examination: General state severe, pale skin, acrocyanosis. Hoarse vesicular murmur in the lungs. Rhythmic, diminished heart sounds, with HR=74 beats/minute, BP=140/90 mm Hg. Liver +4 cm.

Paraclinical investigations: ECG at admission: Sinus rhythm, HR=95/minute, LV myocardium hypertrophy, repolarization changes on the inferior wall of the LV. Repeated ECG: comparatively, with no visible changes. Echo-CG: Moderate aortic stenosis. Regurgitation of the AoV of the IInd degree. Moderate dilation of the LA, RA, RV. Akinesia of the inferior wall of the LV, of the basal and medium segments in the lateral and posterior walls of the LV. Akinesia of the RV wall. Regurgitation of the TV of the IIIrd degree, MV of the IInd degree. Severe pulmonary hypertension. Markers of myocardial necrosis: negative.

Treatment: Beta-blockers, nitrates, diuretics, ACE inhibitors, anticoagulants, antiplatelets.

Conclusion: The patient R., 72 years old, presenting with an extended AMI, involving the LV and RV, which determined intensive therapy. According to literature data, patients with an inferior AMI of the LV, involving the RV, have a worst prognosis.

Keywords: RV, infarction, extended, morbidity

48. PARTICULARITIES OF SEXUAL FUNCTION IN MEN WITH OBESITY

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Introduction: Obesity has become a worldwide public health problem of epidemic proportions. In 1980, about 5 % of men worldwide were obese, by 2008 the rate was nearly 10%. It's no secret that obesity is hazardous to health. Men pay an extra price for excess weight, since obesity takes a special toll on male hormones and sexuality.

Purpose and Objectives: The objective of the study was to show the peculiarities of sexual function and sex hormones profile in men with obesity.

Materials and Methods: 42 male patients were included in the study. Young age (20-30 years) and BMI ≥ 30 kg/m² were including criteria. Patients were divided into three groups according to degree of obesity: group 1 – 11 patients (BMI from 30 to 34.9 kg/m²); group 2 – 13 patients (BMI from 35 to 39.9 kg/m²) and 18 patients displayed to morbid obesity (BMI > 40 kg/m²) – group 3. The following analyses were done: anthropometric study (waist circumference, body weight, BMI), common blood test, serum lipid, hormonal profile (total and free testosterone, LH, estradiol), SHBG.

Results and Discussion: The prevalence of androgen deficiency (circulating total testosterone < 12 nmol/L) is different for the three groups and increases with BMI. Thus, in men from group 1 the prevalence of androgen deficiency was 45.5%, in men from group 2 and 3 was 69.2% and 86%, respectively. The total testosterone levels decrease linearly with the increasing of BMI, from the average value of 11.8 ± 1.6 nmol/l in group 1 to 9.5 ± 1.9 and 7.3 ± 0.4 nmol/l in men from group 2 and 3, respectively ($p < 0.05$, $r = -0.91$). The LH levels don't change significantly for the 3 groups, ranging from 3.38 ± 0.77 to 2.6 ± 0.46 U/l. The estradiol levels increased linearly with the decreasing of testosterone

levels, from the average value of 45.1 ± 1.8 pg/ml in group 1 to 46.6 ± 1.6 and 52.5 ± 2.6 pg/ml in men from group 2 and 3, respectively. The prevalence of clinical manifestations of sexual dysfunction in men from group 1 was 36.4%, in men from group 2 and 3 was 61.5% and 88.8%, respectively. The most common clinical manifestations are decreased libido (9.1-27.8%) and erectile dysfunction (18.2-44.4%).

Conclusions: The prevalence of androgen deficiency increases with the obesity's degree from 45.5% to 100%. In the same time, there is not a compensatory secretion of LH. The androgen deficiency is associated with the linearly increasing of estradiol levels, from the average value of 45.1 ± 1.8 pg/ml in first degree of obesity to 52.5 ± 2.6 pg/ml in third degree of obesity ($p < 0.05$, $r = -0.92$). Sexual dysfunctions are more frequent in men with severe obesity 88.8%. The most common clinical manifestations are decreased libido (9-22%) and erectile dysfunction (18-44%).

Keywords: Obesity, androgen deficiency, testosterone, decreased libido, erectile dysfunction

49. QUALITY OF LIFE OF PATIENTS WITH RHEUMATOID ARTHRITIS AND METABOLIC SYNDROME

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Introduction: Metabolic syndrome (MS) – syndrome, which is based on insulin resistance – impaired insulin-mediated glucose utilization by peripheral tissues. Rheumatoid arthritis (RA) – an autoimmune rheumatic disease of unknown etiology, which belongs to the group of the most common chronic inflammatory diseases. RA is one of the most often causes of disability, not just temporary - more than half of patients consistently incapacitated in 5-10 years from onset. Metabolic syndrome was the focus not only rheumatologists, but also cardiologists, endocrinologists, gynecologists, forcing allied professionals actively cooperate.

Aims and Objectives: Study was to examine the clinical status based on the study of quality of life (QL) in patients with rheumatoid arthritis (RA), depending on the presence of metabolic syndrome (MS).

Methods and Results: The study involved 20 patients who were hospitalized in the department of Rheumatology of Chernivtsi Regional Hospital. I group consisted of 10 patients with rheumatoid arthritis. The II group included 10 patients with RA combined with MS. The control group consisted of 10 healthy individuals. QL assessment was carried out by questionnaire HAQ (Health Assessment Questionnaire). Articular status was assessed according to pain, joint, inflammatory indices, as well as the status of local joints Ritchie. Statistical analysis of the data was carried out using the program Statistica 6.0. It was established, that patients with RA had lower ($p < 0.05$) articular indices and local status than in patients of main group where RA was combined with MS, which is possible due to persistent inflammation and decreased immune status. Index HAQ (survey to assess the health status) in the group of patients with combined lesions was 20.2% higher ($p < 0.05$).

Conclusion: In patients with rheumatoid arthritis, the presence of concomitant metabolic syndrome leads to worsening of clinical picture and quality of life.

Key words: Metabolic syndrome, rheumatoid arthritis

50. THE SOCIAL SUPPORT FOR PATIENTS WITH KNEE OSTEOARTHRITIS

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Introduction: The knee osteoarthritis (OA), the most common chronic illness, has the potential to compromise the health and quality of life of not only in the patient but also affect family members. The burden of disease determines the need to provide socio-emotional support and task assistance to the patient.

Purpose and objectives: To determine the social support to the patients with knee OA.

Material and methods: Patients were eligible for inclusion in this trial that had experienced clinical symptoms of osteoarthritis (OA) in the knee at least 3 months before inclusion into study. All patients were required to fulfill the American College of Rheumatology classification criteria for knee OA. We used data for the Knee Injury and Osteoarthritis Outcome Score (KOOS) to assess patient's self-reported knee pain, function and quality of life. The social support was evaluated by Interpersonal Support Evaluation List (ISEL) 12, consisting in 3 subscales (appraisal, belonging, tangible). This study was conducted according to the principles of the Declaration of Helsinki (1996) and good clinical practice.

Results: We examined 29 patients with OA, mean age 62.52 ± 7.92 years, (range 55-70), 86.2% women. For the entire sample, knee pain was present in the majority (100%) of patients. The radiographic characteristics: KL II-15 (51.72%) patients, KL III - (44.82%) and the most severe form in just one case. The KOOS results showed that Pain level was 71.99%, Symptoms 74.28%, Activity Daily Living (ADL) – 61.14%, the possibility to practice sport was the worse score 45%, and the QoL – 60.33% qualified as middle. The social support was 31.2 points appreciated satisfying, the high score was ISEL – appraisal-12, tangible-9.8 points and belonging-9.3 appreciated the worse. There were significant indirect correlation between the age of patients and ISEL total $r = -0.71$ ($p < 0.001$) and mild correlation between social support and symptoms, functionality of knee and pain $r = 0.51$ to 0.54 ($p < 0.05$). Also, moderate correlation were found between the QoL and ISEL total $r = -0.52$ ($p > 0.06$).

Conclusion: Pain as a common symptom of knee osteoarthritis had a substantial influence on the degree of social support perceived by the patients. The age and disease manifestation determined the level of social support and decreased directly the quality of life.

Key words: Knee osteoarthritis, social support

51. CHARACTERISTICS OF ARTERIAL HYPERTENSION IN ELDERLY

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Introduction: Cardiovascular diseases are responsible for about 17 million of deaths per year worldwide, representing almost a third of total mortality. Of these, 9.4 million of deaths a year are caused by complications of high blood pressure (hypertension). Hypertension causes at least 45% of deaths from cardiovascular disease and 51% of deaths from strokes celebration. In some populations, the number of hypertensive exceeds 50% between people over the age of 60 years.

Purpose and objectives: Determination of the clinic-evolutionary features of hypertension in the elderly.

Materials and methods: The study was conducted on a sample of 90 patients' currents during October 2013–January 2014.

Results: Based on the established goal we assigned patients into two groups: the first group is the active patients of working age to 65 years and the second group is represented by patients older than 65 years. Distribute these groups by sex was determined that both groups of woman sex prevail: in the group with patients up to 65 years – 63% and in the group of elderly patients – 53%. Following the distribution of patients with hypertension by age observed that patients aged up to 65 years represent – 33.4%, but patients over 65 years represent – 66.6%. Analyzing triggers hypertension in both groups was revealed that in patients up to 65 years predominate multiple factors (stress, coffee, alcohol) – 46.6%, the second factor is stress – 40% in elderly multiple factors predominate (stress, coffee, excessive consumption of food) – 86.6%, stress as single – factor as 10%. HTA values is divided as follows: in patients up to 65 years dominate HTA of first degree 30% and second degree 40%, a controversy is observe in elderly patients where prevails hypertension of the third grade – 36.6% and hypertension isolated systolic – 41.6%. As concomitant diseases are prevalent in elderly patients –

58.3% compared to patients up to 65 years – 46.6%. Of these diseases in the elderly is frequently pathology: renal – 8.2%, articular – 20%, DZ – 15%, hypertensive encephalopathy – 10%. Analysis revealed dyslipidemia, in patients up to 65 years hypercholesterolemia – 60%, hypertriglyceridemia – 47%, hypercholesterolemia in elderly patients – 74%, hypertriglyceridemia – 52%.

Conclusion: Analyzing all the particulars we determined hypertension in the elderly: major factors in the onset of hypertension are multiple factors (stress, coffee, excessive consumption of food). Blood pressure values indicate greater weight of third degree and HTA and isolated systolic hypertension and not least the presence of concomitant diseases and changes lipids is found in most elderly patients.

Keywords: Elderly, hypertension

52. PATTERN OF ARRHYTHMIAS IN RHEUMATIC MITRAL VALVE DISEASES

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Introduction: Cardiac arrhythmias are clinical entities that producing symptoms and complications importance being ranked in the top responsible for sudden death heart disease in adults. It is known that rheumatic heart diseases are associated frequent with cardiac arrhythmias, caused by organic heart involvement, followed by hemodynamic and electrophysiological disturbances.

The aim of study: To determine the characteristics of arrhythmias in patients with rheumatic mitral valve diseases.

Materials and methods: The study group included 50 patients with mitral valve disease evaluated by the questionnaire, which included general data, history of the disease, physical examination and the results obtained by laboratory investigations. Depending on the prevalence of involvement patients were divided into group I – 37 patients with mitral stenosis and group II – 13 patients with mitral regurgitation.

Results: Mean age of study group was 49.3 ± 0.02 , the ratio women: men being 2:1. Medical history revealed acute rheumatic fever in childhood in 17 (34%) patients and prosthetic valve replacement in 18 (36%) cases. Analyses of the residence demonstrated that most patients with mitral valve disease come from urban areas in both groups: 26 (72.9%) and 7 (53.84%) in group I and II, respectively. Patient complaints revealed clinical manifestations more expressed in mitral stenosis group: palpitations had 35 (94.55%), dyspnea – 36 (97.27%) patients, while in mitral regurgitation predominated dizziness in 12 (92.32 %) cases. According NYHA classification in mitral stenosis patient's functional class was more advanced: III degree in 15 (40.51%) vs. 3 (23.03%) patients with mitral insufficiency. ECG analysis found that in the group with mitral stenosis predominate arrhythmias 36 (97%) patients, whereas in the group with mitral regurgitation - conductivity disturbances, detected in 9 (69%) patients. Chronic atrial fibrillation and complete left bundle branch block of Hiss were the most common deviations in mitral stenosis, found in 20 (54%) and 8 (21.62%) respectively. AV blocks were identified only in mitral regurgitation - 6 (46.15%) patients. According to CHADS2 score and Birmingham SCCHA2DS2VASc scheme we determined that high thromboembolic risk (3 points) is more prominent in mitral stenosis in 18 (48.33%) vs. 3 (23.0%) patients with mitral insufficiency.

Conclusion: Rheumatic mitral heart diseases usually associated with cardiac arrhythmias. In mitral stenosis is more common atrial chronic fibrillation, whereas AV blocks are characteristic for mitral insufficiency patients. Thromboembolic risk is higher in mitral valve stenosis.

Keywords: Cardiac arrhythmias, mitral valve disease

53. CASE REPORT: A 55 OLD WOMAN WITH PSEUDOTUMOR CEREBRI, URTICARIAL VASCULITIS AND SUSPECTED SJOGREN SYNDROME

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Case report: We report a case of a 55 old woman presenting complaints of severe and permanent headache with progressive decrease of visual acuity (VA) for 6 months, xerophthalmia, xerostomia and urticarial eruption. The medical history of the patient is marked by autoimmune thyroiditis and active tobacco smoking (10 cigarettes / day during 20 years). The physical examination was remarkable by a normal body mass index and skin lesions specific for urticarial vasculitis. The remainder of examination was normal. The CBC, biochemical, auto-antibodies and radiological examinations were normal too. The evaluations included the assessment of the cephalalgia: complete neurologic examination, fundus examination, MRI of the brain and a lumbar puncture. The results have revealed a papilledema, a decrease of VA and an elevation of the opening pressure at the lumbar puncture. The diagnosis conclusion was the presence of pseudotumor cerebri, which is a disorder clinically manifested by chronically elevated intracranial pressure of unknown etiology associated with visual abnormalities. The skin biopsy revealed small vessels wall deposits of IgG and C3, and a polynuclear perivascular infiltrate. The last question was the etiology of the Sicca syndrome, who is supposed to be a Sjogren syndrome. The Shirmer test and the salivary gland scintigraphy confirmed our suspicion. We proceeded to salivary gland biopsy, whose result is on pending.

Conclusion: We report a case of a smoking woman who presents a pseudotumor cerebri, urticarial vasculitis where was suspected Sjogren syndrome, defined as a systemic chronic inflammatory disorder characterized by lymphocytic infiltrates in exocrine glands. If the principle of parsimony is used, the three entities can be linked: to our known, in the medical literature where are few case reports concerning the association of Sjogren syndrome and pseudotumor cerebri as a very rare neurological complication. In its turn, the urticarial vasculitis is a known manifestation of Sjogren syndrome.

Keywords: Sjogren Syndrome, Urticarial Vasculitis

54. HEALTH-RELATED QUALITY OF LIFE AND ECONOMIC BURDEN OF KNEE OSTEOARTHRITIS

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Introduction: Patients with knee osteoarthritis have the symptoms that often are debilitating and causing physical impairment, can affect the psychosocial wellbeing of the patient. The impact of knee OA on patient's lives has not been well studied in developing countries.

Purpose and objectives: Of this study was to assess the health-related quality of life (QoL) and burden in patients with OA in Republic of Moldova.

Materials and methods: This study is a retrospective, cross-sectional, nonrandomized, with subjects stratified according to disease severity based on functional limitation and absence of joint prosthesis. Subjects were recruited from primary care and rheumatology. There were 256 patients whom fulfill the American College of Rheumatology classification criteria for OA in the knee. A questionnaire embrace information on demographic and socioeconomic characteristics, function limitation, use of health and social services, and effect on occupation and living arrangements over the previous 12 months. The costs were calculated as direct and indirect. The QoL was assessed by KOOS – Knee injury and Osteoarthritis Outcome Score. This study was conducted according to the principles of the Declaration of Helsinki (1996) and good clinical practice.

Results: There were 256 patients integrated in the study including 196 females and 60 males, mean age 64.9 ± 0.6 years (range 37 to 82 years). Disease duration 8.1 ± 0.02 years (range 1-

51). The KOOS results showed that the QoL - 35.7% qualified as low. OA affected family or close relationships in 66%. The level of activity in daily living was 44.0% lower than the level of pain with 57.1% or other symptoms - 64.9%. The average cost excluding joint replacement was \$685, the direct costs 71.04% from them (mean \$485) per person per year and indirect costs - 29% (\$190). The direct costs are comparable to those reported in Western countries; however, the insurance covers just 50.7% from direct costs.

Conclusion: Patients with knee osteoarthritis have impaired QoL as well as substantial socio-economic burden attributable to disease. The economic impact of OA is largely placed on the patients, they having relatively high out-of-pocket expenditures.

Keywords: Knee osteoarthritis, QoL, burden of disease

55. STUDY OF CONTEMPORARY LITERATURE ON THE TOPIC OF "PEDIATRIC ABDOMINAL TUMORS"

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Background: Abdominal cancers are seen very infrequently in patients younger than 15 years, and most of the evidence is derived from case series. As the treatment for childhood cancer has improved dramatically over the past three decades, most children diagnosed with cancer today survive this illness.

Material of study: Abdominal cancers include adrenocortical tumors, carcinomas of the stomach, cancer of the pancreas, colorectal carcinomas, carcinoid tumors, and gastrointestinal stromal tumors. Tumors in the abdomen usually don't create many obvious symptoms, especially when they're in the early stages. If the mass grows or spreads, a person may experience swelling and pain, diarrhea, weight loss, nausea, vomiting, bad breath, and digestive problems. A malignancy may also cause fatigue, fever, and blood in the stool. Some types of tumors have more specific symptoms associated with them: for instance, people with liver masses often become jaundiced, and those with ovarian cancer may have painful menstruation or pain during intercourse. Likewise, those with bladder growths may have a hard time urinating, and those with kidney cysts often have high blood pressure.

Result: One of the most common abdominal tumors in pediatrics is the renal tumor (Wilm's tumor), which is found in 45% of patients with an incidence of 8 cases per million of children under the age 15. And mutations of the WT1 gene on chromosome 11p13 are observed in approximately 20% of Wilm's tumor. One of the real successes of modern medicine survival was in the 1930s - 30% but in the 2010s - >90%.

Conclusion: Advances in molecular genetics research in the past 3 decades have led to an increased understanding of the genetic events in the pathogenesis and progression of human malignancies, including those of childhood. A number of pediatric malignancies serve as models for the molecular analysis for a variety of purposes.

Keywords: Abdominal tumors, mutation, Wilm's tumor

56. RIGHT VENTRICULAR REMODELING IN METABOLIC SYNDROME

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Introduction: The right ventricle (RV) plays an important role in the morbidity and mortality of patients presenting with signs and symptoms of cardiopulmonary disease. However, the systematic assessment of right heart function is not uniformly carried out. The impact of the metabolic syndrome (MS) on the RV was examined in very few studies. Considering the epidemic spreading of MS, its adverse effect on RV remodeling and the unfavorable role of RV hypertrophy

on mortality, it would be very useful to find which parameters of MS and which combinations of parameters were independently associated with RV changes in both genders.

Purpose and Objectives: Highlighting the importance of the evaluation of right ventricle function in patients with metabolic syndrome for the assessment of prognostic and possible early intervention.

Material and Methods: The analysis of available literature about the methods of the assessment of right ventricle function and its particular importance in patients with metabolic syndrome.

Results: For decades, the RV was considered as the "unstressed" ventricle, unnecessary for the complex cardiac function. At the beginning, authors were interested only in congenital heart diseases and pulmonary hypertension, which severely impacted the RV. However, gradually the attention of researchers focused on other pathological conditions as hypertension, diabetes and obesity or their combinations. Subjects with the MS have a significantly changed right ventricular structure and function. Women and men with MS have different predictors of RV hypertrophy and diastolic dysfunction, considering individual MS criteria or their combinations. Abdominal obesity and increased glucose level are independent predictors of RV hypertrophy and diastolic dysfunction exclusively in women with MS. In addition, among women with MS, triad of MS risk factors such as increased BP, hyperglycemia, and dyslipidemia, is an independent predictor of RV hypertrophy; whereas the other triad (increased glucose level, abdominal obesity, and dyslipidemia) is a predictor of RV diastolic dysfunction. Treatment of hypertension and diabetes not only improves the structure and function of the left ventricle as generally thought but of the RV as well.

Conclusion: MS has an important role in damage of RV structure and function. Despite preserved left ventricular systolic function, both systolic and diastolic functions of the RV deteriorate in MS patients. Among MS criteria systolic blood pressure, waist circumference and glucose level are independently associated with RV structure and function. Different parameters of MS are responsible for RV remodeling in women and men. The metabolic parameters of MS are more important for RV remodeling in women.

Keywords: Metabolic syndrome, right ventricle, diastolic dysfunction

57. THE ROLE OF DOBUTAMINE STRESS ECHOCARDIOGRAPHY IN THE ASSESSMENT OF MYOCARDIAL VIABILITY IN PATIENTS WITH ISCHEMIC LEFT VENTRICULAR DYSFUNCTION

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Introduction: Stress (exercise or pharmacologic) two-dimension transthoracic echocardiography can be used to demonstrate the presence of coronary disease, to assess myocardial viability prior to revascularization, to identify "culprit" lesion, etc. Impaired left ventricular (LV) systolic function in patients with coronary heart disease is often a partially reversible process and it may improve markedly, and even normalize, in subsets of patients following successful revascularization. The myocardium that recovers function after revascularization has been called "hibernating". To the extent that improvement in regional or global LV systolic function is a significant goal in such patients, the ability to accurately assess regional myocardial viability in a dysfunctional territory prior to revascularization becomes an important component of the decision making process.

Purpose and Objectives: The role of Dobutamine stress echocardiography (DSE) in the evaluation of myocardial viability in the setting of hibernation will be reviewed here.

Material and Methods: The analysis of the available literature about the importance and clinical application of Dobutamine stress echocardiography in the assessment of myocardial viability.

Results: DSE is an important noninvasive clinical tool for the detection of hibernating myocardium. It examines the "inotropic reserve" of dysfunctional but viable myocardium. A contractile response to Dobutamine appears to require that at least 50 percent of the myocytes in a given segment are viable; the contractile response also correlates inversely with the extent of interstitial fibrosis on myocardial biopsy. The predictive value of Dobutamine stress echocardi-

graphy appears to be greatest when there is a biphasic response: improvement at low dose and worsening at high-dose Dobutamine. The initial improvement in wall motion reflects recruitment of contractile reserve during low-dose Dobutamine, and hence reflects viability. In comparison, higher doses lead to subendocardial ischemia and worsening of the wall motion abnormality, identifying stress-induced ischemia. Thus, testing at various doses appears to be important for the optimal assessment of myocardial hibernation by this technique. Patients with left ventricular dysfunction who demonstrate myocardial viability with Dobutamine stress echocardiography have a better survival with revascularization than with medical therapy.

Conclusion: The available data strongly suggests that DSE studies help differentiate viable from nonviable myocardium, and identify patients with ischemic LV dysfunction that will most likely benefit from coronary revascularization.

Keywords: Stress echocardiography, myocardial viability, hibernating myocardium

58. STUDY OF CONTEMPORARY LITERATURE ON THE TOPIC OF "CONGENITAL CLUBFOOT IN CHILDREN"

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Background: Clubfoot (TEV) is a congenital disorder, involve bone deformity and malposition in form of a curled shape or twisted position of the ankle, heel and toe with soft tissue contraction, that if left untreated can limit a person's mobility by making it difficult and painful to walk although inexpensive and reliable treatment exist, especially with the ponseti method.

Material of study: Congenital clubfoot (CTEV) is including several form of deformity: Talipes varus, Talipes valgus, Talipes equines, Talipes calcaneus, Talipes cavus. Easily identify in a new born which present with abnormal shape and rigid foot, leg torsion and tightening of Achilles tendon. Therefore immediately apply treatment with gentle manipulation follow by serial of casting, ending with splintage. Failure of conservative treatment and late presentation after 5 month of age are indications for surgery.

Results: Affected foot is usually smaller and shorter. Approximately appear in 1 case per 1000 live birth, male-to-female ratio is 2:1, bilateral involvement in 30%-50% of cases, there 10% chance of subsequent child being affected if parents already have a child with a clubfoot.

Conclusion: Clubfoot is the most common congenital anomaly of the foot found in children, frequency ranks second after locomotors pathology. It affects mainly males, as can be unilateral and bilateral. Outcome following management is subjectively good for the majority of patients.

Keywords: congenital clubfoot, anomaly, deformity

59. CHRONIC HEART FAILURE IN HYPERTENSIVE PATIENTS

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Introduction: Hypertension remains a major public health problem associated with considerable morbidity and mortality. Hypertensive heart disease is a constellation of abnormalities that includes left ventricular hypertrophy (LVH), systolic and diastolic dysfunction and their clinical manifestations including arrhythmias and symptomatic heart failure (HF). Presently, diastolic heart failure accounts for about 50% of the heart failure population.

Purpose and objectives: To determine the clinical and laboratory characteristics of heart failure in patients with hypertension.

Methods: It was a prospective study of 23 patients admitted in Institute of Cardiology

diagnosed with grade I-III systemic hypertension. We evaluated general data, history of disease, physical examination, laboratory and instrumental results, including ECG and echocardiography.

Results: In the study group was observed the prevalence of women, the rate women: man being 1.9:1, with mean age 59.3 ± 0.02 . General data indicated that most patients originate from urban areas – 19 (82.60%) versus 4(17.40%) from the village. Family history of hypertension was present in 2 (9%) patients. Among the cardiovascular risk factors were identified type II diabetes in 5(21.7%) and obesity in 5(21%) patients. The distribution according stages of hypertension demonstrated that most patients had stage II – 18 (78.2%), followed by 5 (21.8%) patients – stage III and only one patient had stage I of hypertension. Clinical spectrum of complains showed fatigue in 11, dyspnea – 16, reduced exercise tolerance and peripheral edema – 6 patients from study group. By NYHA classification predominated the III functional class – 14(60, 86%), followed by II class – 6 (26%) and only 3 (13, 04%) patients had I NYHA class. ACC/AHA stages of HF indicated that most of patients were included in stage C – 20 patients, 2 patients – stage A and only 1 patient had sage B of HF. Analyzing ECG was established left ventricular hypertrophy in 14 (56.6%). By echocardiography were appreciated concentric hypertrophy in 16 (69.6%), cardiomegaly was determined by dilatation of left atrium in 19 (82.6%) patients, left ventricle – 3(13.04%) and decreased EF <50% in only 4(17.39%) cases.

Conclusion: Patients with hypertension and clinical diagnosis of heart failure presented left ventricular hypertrophy and impaired diastolic filling without systolic dysfunction.

Keywords: hypertension, hypertensive heart disease, chronic heart failure

60. NEBIVOLOL TREATMENT INFLUENCE ON CARBOHYDRATE AND LIPID METABOLISM IN PATIENTS WITH METABOLIC SYNDROME

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Introductoin: Metabolic syndrome is a cluster of the most dangerous cardiovascular risk factors: diabetes mellitus, abdominal obesity, dyslipidemia and arterial hypertension. According to the International Diabetes Federation from 2006, about 25 % of the world's population presents the metabolic syndrome, with a two-fold higher risk of death, and three times more frequently myocardial infarction and/or cerebral stroke occurrence.

Purpose of the study: To assess the influence of Nebivolol 5 mg, on carbohydrate and lipid metabolism in patients with metabolic syndrome.

Material and methods: The metabolic syndrome diagnosis was established according to the criteria proposed in the recommendations of the International Diabetes Federation (2005). In our study were included 90 patients (divided into two groups: with metabolic syndrome - 45 patients and without metabolic syndrome - 45 patients), who received a third generation selective β -blocker with vasodilator action – Nebivolol, 5 mg/day. Indices of glucose metabolism, insulin resistance, lipids and apoproteins spectrum were evaluated initially and after 2 months of treatment with nebivolol.

Results and discussions: Comparative analysis of studied indices in patients according to the presence of metabolic syndrome after treatment with Nebivol, revealed no changes in carbohydrates spectrum (basal glycemia, F. Caro index, HbA1c, glycated albumin, glycemic profile) in both groups. However, the monotherapy with Nebivolol 5 mg single dose daily for 2 months, was associated with significant reduction of total cholesterol in patients with metabolic syndrome ($p < 0.01$) and no reduction of it in patients without metabolic syndrome ($p > 0.05$).

Analysis of LDL cholesterol has proved essential reduction compared to the initial values in the group of metabolic syndrome patients ($p < 0.05$) and their slight diminution in the group without metabolic syndrome ($p > 0.05$). Similar changes were observed in the dynamics of triglycerides by important reducing of their level in patients with metabolic syndrome ($p < 0.001$) and minor decrease in patients without metabolic syndrome ($p > 0.05$). Regarding HDL cholesterol did not change

significantly in both groups. The atherogenic indices presented the following modifications: CoAt diminished in patients with metabolic syndrome ($p < 0.001$) and had an unimportant change in patients without metabolic syndrome ($p > 0.05$). Some changes were noted in the dynamic of total cholesterol/HDL cholesterol and LDL cholesterol/HDL cholesterol interaction. Thus, in patients with metabolic syndrome was observed the reduction of the ratio total cholesterol/HDL cholesterol ($p < 0.001$), and of the ratio LDL cholesterol/HDL cholesterol ($p < 0.01$), while in the group without metabolic syndrome was noted insignificant change in the ratio total cholesterol/HDL cholesterol ($p > 0.05$) and the ratio LDL cholesterol/HDL cholesterol ($p > 0.05$).

Conclusions: In patients with metabolic syndrome Nebivolol improved lipid status by significantly reducing the total cholesterol, the LDL cholesterol, and the triglycerides. The treatment with Nebivolol had low influence on carbohydrates metabolism.

Key words: Nebivolol, carbohydrate, lipid metabolism, metabolic syndrome

61. HYPERLEPTINEMIA AND LEPTINO-RESISTANCE IN PATIENTS WITH HYPERTENSION IN CASE OF METABOLIC SYNDROME

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Introduction: Metabolic syndrome (MS) is found in 20-25% of the population, in 15% of Europeans and in 23% of Americans. High blood pressure (HBP) is often associated with anthropometric and metabolic disorders, including abdominal obesity (AO), insulin resistance (IR), and other disorders of the MS. The effect of leptin on blood pressure (BP) indicates that leptin plays an important role in the BP control, it reflects the body fat mass (FM), which produces the leptin and is importantly increased in case of obesity. Hyperleptinemia (HL) may be associated with leptino-resistance (LR), usually in case of obesity.

Purpose of the study: The purpose of the research was to assess the role of leptin metabolism, hyperleptinemia and leptino-resistance in hypertensive patients in case of metabolic syndrome.

Material and methods: The study included 294 patients. The main criterion for selection was the HBP of Ist and IInd degree. The selection of the groups of patients with and without MS for further investigations was carried out according to the classification criteria of the NCEP/ATP III (2005). Leptin concentration was determined by immunoenzymatic method. The normal blood levels of leptin in women – from 4.1 to 25 ng/ml, in males – from 1.2 to 9.5 ng/ml.

Results and discussions: The men's average leptin levels in the analyzed group were found to be significantly lower than in women (17.51 ± 1.36 ng/ml vs. 29.33 ± 2.14 ng/ml, $p < 0.001$). Spearman correlation analysis showed a direct dependence in both groups of patients between leptin levels and BMI (Body Mass Index). We also observed that leptin level is higher in MS patients, presenting in all cases IR and disturbance of insulin sensitivity of the tissues.

After determining the secretory activity of adipose tissue (AT) by leptin level, and after the investigation of basal insulin (BI) in patients with MS, we obtained: 1) hyperleptinemia - 83.3 % of patients (average concentration of leptin in women - 41.58 ± 5.12 ng/ml, and in men - 29.02 ± 3.68 ng/ml with normal values from 4.1 to 25 ng/ml), which suggests the presence of a pronounced LR in patients with MS and 2) basal hyperinsulinemia in 67 % of patients (the average BI was 18.12 ± 4.03 IV μ UI/ml). All the patients (100%) presented an increased HOMA_{IR} index (the average index was 4.04 ± 0.95 conventional unities, normal values < 2.5), which corresponds to an elevated IR in these patients. Therefore, the patients that were included in our study, in addition to the MS signs, manifested important changes of AT secretory activity with associated LR and IR.

The Spearman correlation analysis showed a statistically significant positive correlation between leptin level in patient with MS and body weight ($r=0.31$, $p < 0.01$), abdominal circumference ($r=0.38$, $p < 0.001$), and BMI ($r=0.69$, $p < 0.0001$). These correlations can be related to the HL, with secondary increased body weight.

Conclusions: Leptin and hyperleptinemia are crucial factors in the various interactions of metabolic

alterations of MS. Hyperleptinemia, as manifestation of peripheral leptino-resistance, was determined in 83.3 % of hypertensive patients with metabolic syndrome, and presented a direct correlation with the increasing of degree of obesity. The relationship between the body mass index, hyperleptinemia and hyperinsulinemia reflects its key role in the pathogenesis of insulin resistance in metabolic syndrome.

Keywords: hyperleptinemia, leptino-resistance, hypertension, metabolic syndrome

62. STABLE ANGINA PECTORIS MANAGEMENT

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Introduction: Stable angina pectoris is the most common form of ischemic heart disease, characterized by constrictive retrosternal pain of short duration, with irradiation to the jaw, shoulders, back or arms, typically occurring with exertion or emotional stress, and improved by rest or nitroglycerin administration. The incidence of angina pectoris in most European countries is between 20,000 and 40,000. Its prevalence is from 2-5% in men of 45-54 years up to 10-20% in men of 65-74 years; from 0.1-1% in women aged 45-54 years up to 10-15% in women of 65-74 years.

Purpose and Objectives: Studying the risk factors, clinical and paraclinical features, and treatment of the patients with stable angina pectoris.

Materials and Methods: The study was conducted on a sample of 124 patients with stable angina pectoris, hospitalized in MCH "Holy Trinity" during November, 2012 – February, 2014. The patients were divided into 2 groups, of 62 patients (50.0%) each: group I - men and group II - women.

Results: In the patients of the study, the clinical picture was determined by the pain syndrome with the predominance of retrosternal pain in 81 (65.32%) cases, in 15 (46.87%) patients the pain irradiating in the left shoulder. Access duration was of 6-10 minutes in most of the cases - 71 (57.26%), yielding to nitroglycerin in 52 (41.94%) cases. Among other clinical signs, the prevailing ones were fatigue in 110 (88.70%) and dyspnea in 99 (79.84%) cases. The analysis of the risk factors for angina pectoris in the both groups emphasized the importance of the: age, family history of cardiovascular diseases, arterial hypertension, diabetes mellitus, dyslipidemia, smoking, obesity. On ECG, pathological changes were present in 96 (77.42%) cases, with ST segment depression in 20 (20.83 %) patients, with the predominance of the supraventricular disorders over the junctional and ventricular ones, and with the prevalence of incomplete right bundle branch block in 31 (32.29%) cases. On Echo-CG, the following deviations were detected: aorta induration in 33 (86.84%) cases, low ejection fraction in 16 (42.11%) cases, left ventricular hypertrophy in 30 (78.95%) cases. Most of the patients - 96 (77.4%) - were administered inpatient treatment with 4 drugs.

Conclusion: Considering that angina pectoris is a pathology with an increased incidence and prevalence, the awareness of the physicians and patients, regarding the early diagnosis and proper management of hypertension and stable angina, has a major value in preventing the development of acute myocardial infarction, acute stroke and other complications.

Keywords: Stable angina, risk factors, management

63. PLATTER'S SYNDROME IN INFANTS WITH ACUTE PNEUMONIA

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Introduction: Acute pneumonia is an inflammatory and infectious process localized in alveolus and pulmonary interstitial tissue caused by a bacterial pathologic agent. According to WHO common symptoms of pneumonia in children and infants include rapid or difficult breathing, cough, fever, chills, headaches, loss of appetite and wheezing. Children under five with severe cases

of pneumonia may struggle to breathe, with their chests moving in or retracting during inhalation (known as “lower chest wall indrawing”). Young infants may suffer convulsions, unconsciousness, hypothermia, lethargy and feeding problems.

It has been observed that in infants with severe cases of acute pneumonia, thymomegalia (also called Platter syndrome) is frequently present.

Purpose and objectives: To find the incidence of thymomegalia (Platter’s syndrome) in infants. To appreciate the clinic and paraclinic signs and symptoms of thymomegalia in infants with acute pneumonia with a severe evolution.

Materials and Methods: The research is based on the observation of 320 patients with acute pneumonia, severe evolution selected during the 2013-2014 years. They have been investigated using clinic and paraclinic examinations. Thymomegalia has been confirmed by radiologic examination. The anamnesis and epidemiologic data, also the personal physiological and pathologic antecedents have been statistically analyzed and interpreted.

Results: From 600 hospitalized infants (1-6 months old) were selected 320 with acute pneumonia. From the total number of infants diagnosed with pneumonia, 27, 5 % presented an enlarged thymus (of I/II/III degree), confirmed by a radiologic examination, more frequent in male infants than female. Acute pneumonia associated with thymomegalia presented a severe evolution with difficulties in treatment. A high rate of co-associated morbidities as anemia, torticollis and hypoxic ischemic encephalopathy were noted in infants with thymomegalia.

Discussions: The possibility that Platter’s syndrome is a sign of a compromised immune system with long-term impact on children health exists. Frequently the thymus hyperplasia disappears to the age of 1 year, if it doesn’t, the children are highly vulnerable to infections. To the age of 3, the incidence of thymomegalic patients is very high in the group of frequently ill children.

Conclusion: Thymomegalia is a frequent condition in infants, causing a severe evolution of acute pneumonia. The infants with Platter’s syndrome are often re-hospitalized, thymomegalia being a sign of a compromised immune system.

Keywords: pneumonia, infants, thymomegalia, Platter syndrome

64. UNSTABLE ANGINA PECTORIS AFTER PCI REVASCULARIZATION WITH THROMBUS ASPIRATION

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Introduction: Percutaneous coronary intervention (PCI) is a non-surgical procedure used in the treatment of coronary artery stenosis. Repeated stenoses of the coronary arteries may develop 6 months later in 40-50% cases of PCI, this resulting in clinical manifestations of cardiac ischemia. Early postinfarction angina pectoris is a form of unstable angina, developing in up to 2 weeks after a myocardial infarction. The present clinical case describes a patient L., male, 50 years old, hospitalized on 26.03.14 in the Cardiology Recovery Department of MCH “Holy Trinity”.

Complaints: constrictive retrosternal chest pain with irradiation in the left shoulder, general weakness.

History of the disease: The patient had an anterior extended myocardial infarction 2 weeks ago, he was hospitalized in Medpark clinics and angiocoronarography was performed, as a result three coronary atherosclerotic lesions were determined with moderately severe stenoses on RCA III and unimportant stenoses on LAD and CX (OM I). In consequence, he was submitted to PCI revascularization with thrombus aspiration. He was discharged for treatment at home with Tab. Aspirini 75 mg daily, Tab. Clopidogrel 75 mg daily for 2 months and was recommended a future stent implantation.

Clinical examination: General state of medium severity. Clear conscience, skin of pale colour. Heart sounds were rhythmic, diminished, with HR=80 beats/minute, Ps=80 beats/minute, BP=110/80 mmHg. Other organ systems had no pathological changes.

Paraclinical investigations: ECG: Sinus rhythm, HR=75/minute, EHA – intermediate, pathologic Q wave in III, signs of LV hypertrophy, repolarization disturbances. Echo-CG: Induration of ascending aortic walls, aortic and mitral valves, EF=64%, contraction function of the LV is sufficient. General and biochemical blood analysis: within normal ranges. Markers of myocardial necrosis: negative.

Treatment: Beta-blockers, nitrates, antiplatelets, ACE inhibitors, anticoagulants, metabolic drugs and diuretics.

Clinical diagnosis: Ischemic heart disease. Unstable angina pectoris. State after PCI revascularization (09.03.14). Congestive heart failure II (NYHA).

Conclusion: The patient L., 50 years old, develops an early postinfarction angina pectoris after being submitted to PCI revascularization with thrombus aspiration, as a result of a myocardial infarction experienced 2 weeks ago. The antiischemic treatment received during hospitalization had a positive effect, leading to symptoms' resolution and the patient is recommended a future stent implantation.

Keywords: Unstable angina, PCI

65. CONTEMPORARY ASPECTS OF INTRAVASCULAR ULTRASOUND IN EVERYDAY PRACTICE

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Introduction: IVUS utility is to quantify the severity of atherosclerotic stenoses that appear angiographically moderate and often significantly reduce the minimum luminal surface. Detailed images of the arteries can be visualized using IVUS catheter that provides cross sections, bidimensional concentric stacked vessels. This catheter possesses rotational transducers able to visualize the vascular wall layers in three positions: longitudinal, rotational and ultrasonographical. In literature, the information about IVUS investigation is modest. The smaller is the distance to the catheter, the better is image clarity. We performed the literature synthesis on IVUS investigation to highlight its priorities in comparison with angiography.

Purpose and Objectives: Taking into account the incontestable medical progresses of the last decades, that had repercussions over the investigations applied in medical practice, there exists a necessity of referring to the recent practical methods, in consequence, a true paradigm shift and replacement of the old methods with modern practice are expected.

Materials and methods: Contemporary bibliographic and scientific data were selected and the recent recommendations on the problem of diagnosing the severity of atherosclerotic vascular stenoses, rarely diagnosed angiographically (~50%) were revised, the morphology and atherosclerotic plaque diameter were studied, parietal calcifications were assessed by intravascular ultrasonography with the electronic study of these complications.

Results: The analysis of literary domain sources reveals that the IVUS method is used mainly in the USA, is currently in a slow phase of growth, with an average of 5-8% of the coronary interventions performed. IVUS utilization in Europe is lower, in Japan it reaches 14-20%, reflecting the reimbursement rates and medical practice patterns. The increasing application of this technique is due to the practical simplicity of use, image quality and precise information about the structure of the vessel.

Conclusion: Identification of unstable plaques in medical practice is one of the main challenges of modern cardiology, because of the prevalence of atherothrombotic phenomena and its consequences on cardiovascular mortality and morbidity. IVUS is a method that quantifies the severity of atherosclerotic stenoses and provides important details of all vascular layers. The detection of unstable plaques by IVUS has a major value, particularly in patients with acute coronary syndrome for the prevention of subsequent atherothrombotic events and administration of the appropriate treatment.

Keywords: IVUS, atherosclerosis, stenosis

66. RISK FACTORS INVOLVED IN THE OCCURRENCE OF ISCHEMIC STROKE**Lisnic Tatiana, Mihaluta Valentina, Soroceanu Ala***Academic adviser: Grib Liviu, M.D., Ph.D., Professor, Cardiology Department, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova*

Introduction: About 60% to 80% of all ischemic strokes can be attributed to increasing blood pressure, blood cholesterol, smoking, diabetes mellitus and atrial fibrillation [American Heart Association, June 29 2006; Potential New Risk Factors for Ischemic Stroke. What Is Their Potential? Graeme J. Hankey]. Hypertension is the single most important modifiable risk factor for ischemic stroke. Various lifestyle factors have been associated with increased stroke risk. These include obesity, physical inactivity, diet, and acute triggers such as emotional stress. Obesity has been associated with higher levels of blood pressure, blood glucose, and atherogenic serum lipids, which are independent risk factors for stroke.

Materials and Methods: Our study included 50 patients with hypertension and cognitive impairment, hospitalized in the cardiology department, Holy Trinity Hospital. We determined the association between MMSE score and incident CV events, adjusted for stroke, diabetes mellitus, atrial fibrillation, smoking and sedentary. We divided patients according to MMSE in 3 categories:

1. Lack of cognitive dysfunction: MMSE-24-30points;
2. Moderate cognitive dysfunction: MMSE-18-23points;
3. Severe cognitive dysfunction: 0-17points.

Maximum score for MMSE is 30 points.

Results obtained:

| | MMSE= 29-27 | MMSE= 26-24 | MMSE <24 |
|--------------------------------|-------------|-------------|----------|
| Stroke-11 patients | 2(18.2%) | 3(27.3%) | 6(54.6%) |
| Diabetes mellitus-17 patients | 4(23.5%) | 6(35.3%) | 7(41.2%) |
| Atria fibrillation-19 patients | 6(31.6%) | 6(31.6%) | 7(36.8%) |
| Smoking-23 patients | 8(34.8%) | 10(43.5%) | 5(21.7%) |
| Sedentary-20 patients | 5(25%) | 5(25%) | 10(50%) |

The table shows that severe cognitive deficit is characteristic of patients with stroke, sedentary, diabetes mellitus. Moderate cognitive dysfunction was characteristic for smoking patients, diabetes mellitus and atrial fibrillation.

Conclusion: Doctors have long called high blood pressure "the silent killer" because a person can have high blood pressure and never have any symptoms. Blood pressure is the most important risk factor in the occurrence of stroke. In our study we tried to demonstrate the relationship between high blood pressure and other risk factors involved in the occurrence stroke, and cognitive deficits caused by these.

Keywords: Stroke, hypertension, risk factors

67. CARDIOVASCULAR EVENTS AND COGNITIVE IMPAIRMENT**Mihaluta Valentina, Grib Andrei, Lisnic Tatiana***Academic adviser: Grib Liviu, M.D., Ph.D., Professor, Cardiology Department. State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova*

Introduction: Cardiovascular disease is an important risk factor for cognitive impairment. It is also assumed that cognitive impairment may increase the risk of future cardiovascular events (CV). There is a growing interest in the relationship between cardiac and cognitive functions, both of which are often impaired in the elderly. Also significant cognitive impairment occurring after stroke and myocardial infarction.

Objectives: To determine the association between risks of cognitive impairment using scores on the Mini-Mental State Examination (MMSE) and CV events.

Methods: Our study included 50 patients (11 strokes, 16 myocardial infarctions and 23 congestive heart failures) hospitalized in the Cardiology Department of Holy Trinity Hospital. We divided patients according to MMSE in 3 categories:

1. Lack of cognitive dysfunction: MMSE-24-30points;
2. Moderate cognitive dysfunction: MMSE-18-23 points;
3. Severe cognitive dysfunction: MMSE-0-17 points.

Maximum score for MMSE is 30 points.

Results obtained:

| MMSE | Myocardial infarction | Stroke | Congestive heart failure |
|--------------------------------|------------------------|-----------------------|--------------------------|
| Lack of cognitive dysfunction | 7 patients (43.75%) | 2 patients (18.2%) | 13 patients (50%) |
| Moderate cognitive dysfunction | 7 patients (43.75%) | 3 patients (27.3%) | 6 patients (23.1%) |
| Severe cognitive dysfunction | 2 patients (12.5%) | 6 patients (54.6%) | 4 patients (15.4%) |

The table shows that severe cognitive deficit is characteristic for patients with stroke and congestive heart failure. Moderate cognitive dysfunction was characteristic for patients with myocardial infarction and stroke.

| | Stroke | Myocardial infarction | Congestive heart failure |
|---------------------------|----------|-----------------------|--------------------------|
| Orientation(time) | 1 (9.1%) | 1 (6.25%) | 2 (8.7%) |
| Orientation (place) | 2 (18.2) | 2 (12.5%) | 2 (8.7%) |
| Registration | 1 (9.1%) | 1 (6.25%) | 3 (13.1%) |
| Attention and calculation | 2 (18.2) | 2 (12.5%) | 2 (8.7%) |
| Recall | 0 | 3 (18.75%) | 2 (8.7%) |
| Naming and repetition | 1 (9.1%) | | 2 (8.7%) |
| Comprehension | 1 (9.1%) | 3 (18.75%) | 2 (8.7%) |
| Reading | 1 (9.1%) | 1 (6.25%) | 2 (8.7%) |
| Writing | 1 (9.1%) | 1 (6.25%) | 3 (13.1%) |
| Copying | 1 (9.1%) | 1 (6.25%) | 3 (13.1%) |

MMSE Scale is an useful tool in detecting cognitive deficit as areas for patients with stroke, while the most characteristic are impairment of orientation (place), attention and calculation. For patients with myocardial infarction the most characteristic are impairment of recall and comprehension, for patients with congestive heart failure the most characteristic are impairment of registration, writing and copying.

Discussion: We found that baseline MMSE had the strongest association with stroke. Previous studies have shown that a prior history of clinical stroke is a much stronger predictor of recurrent stroke than myocardial infarction and congestive heart failure.

Conclusion: MMSE is detecting tool for cognitive impairment in predicting cardiovascular events.

Keywords: Cognitive impairment, stroke

68. HYPERTENSION AS A RISK FACTOR FOR STROKE

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Introduction: Uncontrolled high blood pressure increases a person's stroke risk by four to six times. Over time, hypertension leads to atherosclerosis and hardening of the large arteries. The risk of stroke is directly related to how high the blood pressure is.

Case presentation: The patient X 63 years old, women hospitalized in Holy Trinity with *Clinical Diagnosis:* Left hemisphere stroke with mild right hemiparesis. Motor dysphasia. Arterial hypertension III degree, very high additional risk. Ischemic heart disease. Stable angina pectoris functional class II. Heart Failure II NYHA. Diabetes mellitus type II.

Complaints at the admission: Limitation of movements in the right hand and leg, speech disorders, memory disturbances, general weakness.

History of current disease: She is considered hypertensive for 10 years, she followed regular medical treatment. On March 7, morning when she woke up, she felt a general weakness, dizziness, lost of consciousness for a short period of time.

Hereditary history: aggravated (mother suffered from hypertension, died of ischemic stroke).

Medical history: hypertension for 10 years, diabetes mellitus type II-7years.

Objective data:

General condition of medium gravity;

Body mass index (BMI) = 36.98-obesity class 2(G = 90 kg, T = 156 cm).

Cardiovascular: auscultation of heart sounds rhythmic, attenuate, with noise II aorta.

Blood pressure – 180/80 mmHg on left hand, 175/80 mm Hg on right hand.

SCORE Index – risk of developing a cardiovascular event in the next 10 years is 6.5%.

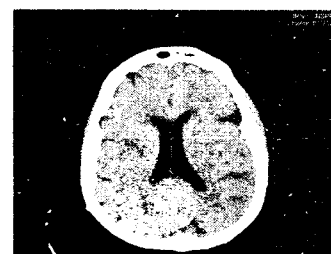
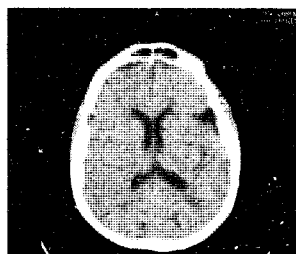
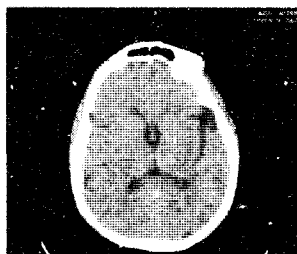
Mini Mental State Examination severe cognitive impairment (19 points).

Neurological examination:

- asymmetric face;
- swallowing preserved;
- deviated to the right tongue;
- right-mild hemiparesis, hypotonia;
- pathological reflexes: Babinski sign positive on right side.

Investigations and laboratory results:

- Biochemical analysis of blood – total cholesterol-7 mmol/l;
- ECG: sinus rhythm, heart rate=72, intermediate axis, left ventricular hypertrophy.
- Head Computed Tomography scan:



CT conclusion: stroke in the middle cerebral artery territory, extinguishing expansion in the periventricular white matter and semiovali centers.

Discussion: Major risk factor is the patient's uncontrolled hypertension values. Patient's other cardiovascular risk factors: diabetes mellitus type II, women age over 60, dyslipidemia, obesity, stress.

Conclusion: Stroke is a serious problem that has a multitude of causative global risk factors. A large percentage of strokes can be prevented if risk factors are known and closely monitored. Reducing the incidence of stroke requires prevention and management of changeable risk factors.

Keywords: Cognition, risk factor, stroke

69. THE ASPECTS OF LIPID AND GLUCOSE METABOLISM FOLLOWING HYPERTENSION TREATMENT IN PATIENTS WITH METABOLIC SYNDROME

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Introduction: The metabolic syndrome is a global public health issue. Using medication that reduces the sympathetic over activity as one of the manifestations of MS, such as cardioselective β -adrenoblockers of the III generation (Nebivolol) and the selective agonist of the imidazoline receptors subtype 1 (I₁) III generation (Moxonidine) is one of the main directions of pharmacotherapy in hypertensive patients with MS.

Purpose and objectives: Highlighting the lipid and glycemic profile modification in hypertensive patients with or without metabolic syndrome after treatment with Nebivolol and Moxonidine.

Materials and Methods: The study included 294 hypertensive patients (Hypertension grade I-II as recommended by the European Society of Cardiology, 2007), of which: MS (group I) - 201 patients and without MS (group II) - 93 patients (control group). The diagnosis of MS was based on the WHO recommendations (1998), IDF (2005). In the treatment phase of the study there were included 191 patients: 93 patients administered for 2 months - Nebivolol and 98 patients used Moxonidine. The gathered material was analyzed statistically by the methods of variational and correlational analysis.

Results: The group of MS patients had an average age of 49.57 ± 0.81 years ($p > 0.05$) and the group of patients with MS had an average age of 48.86 ± 1.03 ($p > 0.05$). Long-term administration of Nebivolol in the current study significantly reduced total cholesterol, LDL - cholesterol and triglyceride levels in MS patients, while blood glucose levels were not changed. In the patients treated with Moxonidine $0.2 \text{ mg} \times 2$ twice/day for two months, the glucose profile was statistically insignificantly changed: 5.18 ± 0.16 mmol/l (initial stage) vs. 5.08 ± 0.12 mmol/l (final stage) ($p > 0.05$), but the basal insulinemia at the initial stage of treatment vs. the final stage (2 months): 9.19 ± 0.51 $\mu\text{UI/ml}$ vs. 8.01 ± 0.52 $\mu\text{UI/ml}$ had a significant statistical difference ($p < 0.05$) and the average value of HOMA_{IR} at the initial vs. the final stage, with a decrease in the insulin resistance index: 1.98 ± 0.11 vs. 1.62 ± 0.11 , had also a significant statistical difference ($p < 0.05$). The analysis of lipid indexes in the whole group and groups of patients with and without MS showed a downward trend for TC, LDL-C, TG, but no changes in HDL-C.

Conclusions: In patients with metabolic syndrome Nebivolol did not influence significantly the glucose metabolism and it improved the state of the lipid, while Moxonidine did not significantly affect lipid metabolism, but improved the indexes of the glucose metabolism.

Keywords: Metabolic syndrome, lipid metabolism, Nebivolol, Moxonidine

70. WOLF-PARKINSON-WHITE SYNDROME, CLINICAL CASE

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Introduction: Wolf-Parkinson-White syndrome (WPW) is a type of ventricular pre-excitation realized through an abnormal connection between the atria and the ventricles, known as Kent bundle, prior to nodo-hisian depolarization. The disease has a genetic substrate, it develops mainly in men, involving a high risk of ventricular arrhythmias and sudden death. The incidence of WPW syndrome is 4 cases per 100,000 persons, while the prevalence is 1-3 cases per 1000 pers. Male/female ratio is 1.5-2/1. About 50 % of patients with WPW develop tachyarrhythmias; the frequency of supraventricular tachycardia paroxysms increases from 10% at the age of 20-39 to 36% over 60 years. The management of the disease depends on the paroxysms frequency and the

types of arrhythmia. We present the clinical case of a man with WPW syndrome who develops recurrent paroxysmal supraventricular tachycardia, treated since 1997.

Clinical case: Patient L., 52 years old, admitted to the Cardiology Department nr.3 of PMSI MCH „Holy Trinity”. Diagnose: WPW syndrome. Paroxysmal supraventricular tachycardia. HF I NYHA. The complaints presented on onset: palpitations, inspiratory dyspnea, fatigue. History of the disease: diagnosed in 1997, when he developed a paroxysm of supraventricular tachycardia. Arrhythmia paroxysms were the cause of repeated hospitalizations - 2-3 times year while being on antiarrhythmic therapy with Amiodarone. On physical examination: The overall condition of medium severity. Clean, normal-colored skin. Vesicular breath sounds, rales missing. Rhythmic heart sounds with HR 170 b/min, BP 120/70 mmHg. ECG conclusion: WPW syndrome. Supraventricular tachycardia with HR 170 b/min. Normal heart electrical axis. LV repolarization disorders. EchoCG: moderate dilatation of LA and RA. Induration of the aortic walls. LV hypertrophy, left ventricular contractile function is preserved. Laboratory analysis without deviation from the norm. Treatment: Amiodarone 800mg-intravenously in perfusion until paroxysm cessation, with subsequent administration after schema.

Conclusions: Patient L., 52 years with WPW syndrome who develops an arrhythmia paroxysm was hospitalized for its cessation and reassessment of treatment strategy. Pharmacological cardioversion had positive effect. The prognosis is favorable for the patient due to rare paroxysms of supraventricular tachycardias with a good response to drug treatment.

Keywords: Wolf-Parkinson-White, pre-excitation, tachycardia paroxysms.

71. DIAGNOSIS AND TREATMENT OF HYPERTENSION IN ELDERLY

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Introduction: Arterial hypertension (AHT) is the most common cause of morbidity and mortality in developed societies. Recent data assessed the current prevalence of arterial hypertension in the world around 30 %.

Materials and Methods: According to the working hypothesis and proposed tasks we approached closely the procedure of selecting patients on which we would focus our exploration, examining a sample of 150 patients diagnosed with hypertension. The assessment was based on questionnaires previously developed under the general and special methods of clinical examination. For each patient selected was completed an original questionnaire that included: general data, historical data, clinical data, laboratory and instrumental examinations performed and supportive treatment. So we followed the following inclusion criteria: certain diagnosis of hypertension and age > 65 years.

Results: We found that patients with predominant isolated systolic arterial hypertension was - 36,66 %. The ratio of male / female predominance certified women in the study group - 59,33%. One of the most important criteria that was statistically evaluated is the classification of patients after BP values. The results show that in the study group predominates isolated systolic hypertension - 36,66%, AHT III - 28,66%, AHT gr. II - 32%, AHT gr. I - 2,6%. Laboratory evaluation found that the most common ECG abnormalities encountered in elderly patients with AHT are HVS (38 %), atrial fibrillation (26%) and reduced FE by echocardiography detect 18,66 % cases. From antihypertensive drugs in elderly with arterial hypertension are commonly used diuretics: loop (71,33 %), thiazide - like (26,66 %) and aldosterone (24%). angiotensin-converting enzyme inhibitors (83,33 %) and the calcium channels blockers (56 %).

Analyzing the treatment of the patient we found that most patients receive combination treatment of 3 antihypertensive drugs 39,33% (59 patients), the combination of two antihypertensives was noted in 33,33% (50 patients), the combination of four drugs have been reported in 37 patients and administration of a single drug has been found in 4 patients in the study group.

Conclusions: Hypertension is a major risk factor for cardiovascular morbidity and mortality, particularly in elderly, so the correct treatment reduces death rates and rates of CV effects related to people over 65 and people aged over 80 years, the treatment does not appear to significantly reduce the overall rates of death, but decreases the risk of heart disease.

Key words: Arterial hypertension, elderly

74. THE ANALYSIS OF CLINICAL AND LABORATORY CHARACTERISTICS IN PATIENTS WITH LIVER CIRRHOSIS AFTER SURGICAL TREATMENT BY AZYGO-PORTAL DEVASCLARISATION AND SPLENECTOMY

Alexa Valeria

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Introduction: Liver cirrhosis is one of the great problems of gastroenterological pathology, as well as a public health problem because of the high incidence, chronicity, severity of complications and high costs involved in the care of these patients. Approximately 77% of patients with hepatic cirrhosis have a severe hypersplenic syndrome with forecast reserved. Surgical approach has proven to be very effective in solving the severe hypersplenic syndrome.

Purpose and objectives: To analyze the clinical and laboratory characteristics in patients with cirrhosis of different etiology within 6 months to 3 years after surgery by azygo-portal devascularisation and splenectomy.

Materials and methods: We studied retrospective 47 patients with liver cirrhosis hospitalized in the department of hepatology and hepato-biliary surgery departments of IMSP - SCR, from 2010 to 2013, undergoing surgical treatment of solving the portal-hypertensive splenopathy. The diagnosis was confirmed clinically, biologically and imagistically. Clinical and laboratory results were analyzed using patient's clinical observation sheets from the archive of IMSP-Republican Hospital using Microsoft Office Excel 2007 and SPSS v. 17.0 programs.

Results: It has been found:

- a significant improvement of the asthenic, hemorrhagic, abdominal pain and dyspeptic syndromes;
- a statistically significant improvement for platelets, leukocytes, erythrocytes and an improvement of the hepatocellular insufficiency syndrome characterized by prothrombin and fibrinogen;
- many of the patients who gather the score for Child-Pugh class B before the surgery passed in class A after it, which shows an improvement in the clinical and paraclinical features;
- a significant decrease in the incidence of upper gastrointestinal bleeding (50% before and 10% after) and its severity after surgery.

Conclusions: This study showed the benefits of surgery by azygo-portal devascularisation and splenectomy in improving the clinical and paraclinical manifestations in patients with liver cirrhosis with portal hypertension.

Keywords: Hepatic cirrhosis, splenectomy, portal hypertension

75. CLINICAL ASPECTS IN CELIAC DISEASE

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Purpose and objectives: Celiac disease or gluten sensitive-enteropathy is a systemic disease with multiple manifestations. The aim of this study was to determine the most important clinical aspects in patients with severe celiac disease (MARSH III).

Material and methods: We conducted a retrospective study on a series of consecutive patients who underwent upper gastrointestinal endoscopy between 01.01.2009-31.12.2013 in Endoscopy Unit of Targu Mures County Clinical Emergency Hospital. We included newly diagnosed patients with celiac disease with histologic confirmation. At least two bioptic samples were obtained from the distal duodenum, which were submitted to histopathological examination and scored according to MARSH criteria in 3 degrees. We included in our study only patients with duodenal atrophy (MARSH III).

Results: During the studied period a number of 32 cases of celiac disease were histologically confirmed. We found a strong predominance of female, 28 cases (87.5%), with a female/male ratio of 7/1. The mean age at diagnosis was 39 years. Anemia was present in 18 patients (56.35%) with hypochromia in 14 cases (77.77%), and normochromia in 2 cases (11.11%). Other laboratory finding was elevated transaminases in 9 patients (20%) and diarrhea syndrome in 13 patients (40.62%). Diabetes mellitus was present in 3 (9.37%) patients.

Conclusions: Our data showed a low prevalence of celiac disease with histologically confirmation, but the list of those who could possibly have celiac disease can be extensive. Celiac disease is associated with a number of other medical conditions, many of which are autoimmune disorders: diabetes mellitus, but also with anemia syndromes with iron deficiency.

Key words: Celiac disease, anemia

76. ECOLOGICAL AND EPIDEMIOLOGICAL FEATURES NOSOCOMIAL INFECTIONS IN INTENSIVE CARE UNIT

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Introduction: Nosocomial infections complicate carrying out medical and diagnostic process, sharply reduce efficiency and enlarge hospitalization duration, raise lethality, leading as a whole to augmentation of economic expenses and causing essential social damage.

Purpose and Objectives: To analyze the ecological and epidemiological characteristics of pathogens causing nosocomial infections in the intensive care unit.

Material and methods: We examined analysis of 122 isolates from 42 patients aged 10 to 71 years, treated in an intensive care unit multidisciplinary hospital. The research materials are tracheal swabs, wounds, pressure sores, washouts from drainage tubes.

Results: In etiologic structure of hospital infection in the ICU prevail gram-negative microorganisms (76,23%): *Enterobacter cloacae* (32,79%), *Pseudomonas aeruginosa* (21,31%) and *Acinetobacter lwoffii* (18,03%), predominantly in the form of monocultures. The microbial associations were found. Associations, circulating at the hospital, have low coefficient of associativity ($k_A = 25,66\%$), between microorganisms exist opposing relationship, therefore, they are unstable and capable to exist short time (Jaccard coefficient = 7,66%). To reduce the frequency of infectious complications must take into account the mechanisms of antibiotic resistance leading pathogens. Particular attention should be paid to resistance to Cefotaxime, Ceftazidime and Cefepime at the leading number of microorganisms. To *Pseudomonas aeruginosa* pay attention to resistance to Ciprofloxacin, as well as resistance to Imipenem, Meropenem and Carbenicillin. Clinical and epidemiological characteristics of nosocomial infections in ICU patients were: the senior age group of risk (50 years and over); leading purulent septic complications-purulent tracheobronchitis, bilateral pneumonia; higher frequency surgical interventions and the intensity of antibiotic therapy; prolonged hospitalization; the later dates of occurrence; conducted a large number of invasive procedures.

Conclusion: Nosocomial infections are one of the most serious problems in epidemiology. The epidemiological situation demands attentive studying and introduction of new systems of infectious control for modification in the style and operating mode in departments of resuscitation and intensive care.

Keywords: Nosocomial infections, intensive care unit, antibiotic resistance

77. ACUTE HEPATITES C IN PREGNANCY-A CASE REPORT**Ciobanu Elena***Academic adviser:* **Tofan-Scutaru Liudmila**, M.D., State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

Introduction: Expressed cytolytic syndrome in quarter 2-3 of pregnancy may create great difficulties in diagnostic and therapeutic approaches. Potential prognostic risk increases the importance of detailed differential diagnosis and adequate therapeutic conduct.

Material and methods: A case report of acute hepatitis C, with onset in the 22nd week of gestation, that put issues of early diagnostic and management. 34 years old woman has been addressed to the SCR, Chisinau with the diagnosis of reference: intrahepatic cholestasis of pregnancy; chronic hepatitis of unidentified etiology, high activity. Fourth pregnancy with normal obstetrical history.

Results: The only accuse was persistent cutaneous pruritus which disrupts sleep. Gravidarum dermatitis was suspected before the hospitalization in the department of infectious diseases. In the referral: ALT – 526.8 U/l, AST – 482.7 U/l, total bilirubin – 30,5 mmol/l, conjugated bilirubin – 23.2 mmol/l, the viral hepatitis markers was negative. The patient was hospitalized in the hepatology department, where ALT was 426.7 U/l, AST – 307.1 U/l, total bilirubin– 24.4 mmol/l, conjugated bilirubin – 15.1 mmol/l, biliar acids – 6.2 mmol/l, aldolase – 12 U/l. Cutaneous pruritus intensity decreased after beginning the treatment with ursodeoxycholic acid. Acute hepatitis C was established after repeated tests for viral hepatitis markers.

Conclusion: Etiology of liver disease in pregnancy may present diagnostic difficulties. It's very important to know the features of possible liver pathologies caused by pregnancy and to remember about the possible association with pregnancy independent conditions.

Keywords: Acute viral hepatitis C, pregnancy, pruritus

78. THE ROLE OF CURB-65 SCORE IN EVOLUTION OF COMMUNITY-ACQUIRED PNEUMONIA**Dulgher Maxim***Academic adviser:* **Gavriliuc Alexandru**, Assistant Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Community-acquired pneumonia (CAP) is a cause of considerable morbidity and mortality in adults, leading to high rates of hospitalizations, especially in the elderly. The 6-point CURB-65 score, one point for each of: Confusion, Urea >7mmol/l, Respiratory rate ≥ 30 /min, low systolic (<90 mmHg) or diastolic (≤ 60 mmHg) Blood pressure, age ≥ 65 years, enabled patients to be stratified according to increasing risk of mortality into different management groups. There are 3 groups: 0-1 points–low severity, these patients may be suitable for treatment at home, 2 points – moderate severity, short-stay inpatient treatment or hospital-supervised outpatient treatment, and ≥ 3 points–high-severity, inpatient treatment, and for the patients with score 4 or 5 treatment in ICU

Purpose and objectives: To assess the usefulness of the CURB-65 score in the management of CAP, and to determine the outcome in relation to the degree of severity using CURB-65.

Materials and Methods: 90 patients admitted to the Institute of Phthisiopneumology "Chiril Draganiuc" with CAP were studied retrospectively. The study group was formed by 43 (47.8%) women and 47 (52.2%) men. The average age was 58.89 ± 18.45 (95 % CI: 55.02 – 58.99) years. The study is based on the analysis of the CURB-65 score to predict the mortality and the need for hospital or ICU admission of patients with CAP, correlated with local criteria for hospital admission and intensive care unit (ICU) admission.

Results: 17 patients (18.9%) were with CURB-65 score 0, 30(33.3%) with score 1, 31 (34.4%) with score 2, 8(8.9%) with score 3, 3(3.3%) with score 4 and 1(1.1%) with score 5. The ICU admission rate, based on presence of 2 or more criteria for ICU admission from the national guideline for CAP was 30% (27 patients), 6 of whom (22.2 %) required mechanical ventilation. 7 patients (7.8%) died, one of them had the CURB-65 score of 2, 3 - score 3, 2 – score 4, and 1 – score 5.

Conclusion: Use of CURB-65 score alone in management of patients with CAP may underestimate the real severity of illness – only 43(47.8%) of admitted patients have CURB-65 ≥ 2 , which is the criteria for hospital admission. Based on CURB-65 ≥ 3 , high-severity pneumonia was in 12 of cases, which represents only 44% of patients with high-severity pneumonia defined by using criteria (2 or more) for ICU admission from the national guideline for CAP. According to this, clinical judgment is essential when deciding on the management of all patients with CAP.

Keywords: CURB-65, community-acquired pneumonia, severity, management

79. STIGMA AND DISCRIMINATION OF PEOPLE WITH MENTAL HEALTH ISSUES AMONG ADOLESCENTS

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Introduction: According to the National Program of Mental Health for 2012-2016 in Republic of Moldova the process of deinstitutionalization, decentralization and reorganization of the mental health system is enhanced, in order to bring mental health services to the community and to facilitate inclusion of people with mental disabilities in society. Based on examples from countries with high socio-economic level the deinstitutionalization process began much earlier, about 40-50 years ago, and one of the major problems which made this process more difficult was the high stigma and discrimination against them. However in Moldova stigma and discrimination against people with mental disabilities in society is poorly studied.

Purpose and objectives: To evaluate stigma and discrimination against people with mental disabilities among adolescents, to determine the causes and conditions in which this stigma and discrimination occur among adolescents.

Materials and methods: The study is made in 3 schools from Chişinău, Bălţi and Orhei cities, in each school were included 25 students, total 75 adolescents. To evaluate stigma among adolescents the AQ-8-C test was administered, elaborated by Corrigan (2005). To evaluate discrimination the adolescents were interviewed using semi-structured questionnaire.

Results: In the study was determined that the low level of acceptance towards the people with mental health issues is largely determined by the prejudices in society regarding these persons. Therefore, 57 (from 75) of participants consider that children with mental disorders should be educated in special schools, 46 believe that people with mental health issues are unable to work, 44 think that these persons are dangerous and should be isolated, 21 consider that people with disabilities may not have family. Stereotypes frequently found in our society towards people with mental health problems are – debilitated, unable to work, dangerous, to be isolated, may not have family, sinful, poor.

Conclusion: In Republic of Moldova were performed very few studies with reference to stigma against people with mental health problem, however our study shows that level of stigma is very high among adolescents – 76% of interviewed adolescents don't want to study together with mentally ill people; 59% believe that these persons are dangerous and should be isolated; 28% think that society has to prohibit these persons to create families. To have a genuine inclusion of persons suffering from mental disorders in the community, the society needs to be educated in order to reduce stigma and discrimination against these persons.

Keywords: Stigma, Discrimination, Mental Health, Disabilities, Adolescents

80. CLINICAL APPLICATIONS OF MRI 3.0 T TRACTOGRAPHY IN THE SPINAL CORD INJURY

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Introduction: Spinal cord lesions are often devastating. Clinical syndrome caused by a spinal injury includes paralysis of the limbs and trunk, with sensory disturbance and dysfunction of the gastrointestinal and genitourinary sphincters. Spinal lesions sometimes remain insufficiently visualized by conventional MRI, therefore it is an important region of interest in biomedical research. DTI (Diffusion Tensor Imaging) tractography is a quantitative MRI technique that can visualize the white matter tracts in vivo, so it can be useful in diagnosing spinal cord injury.

Purpose and objectives: To assess the feasibility and clinical value of MRI 3.0 T tractography for evaluating spinal cord injury.

Materials and Methods: Imaging was performed on total of 10 subjects: 7 patients with suspected pathology of the spine (ischemic, tumorous, degenerative) and 3 healthy volunteers. Imaging was performed at 3.0 T MRI (Siemens Skyra) with tractography reconstruction. Regions of interest were defined manually and measured on apparent diffusion coefficient (ADC) and fractional anisotropy (FA) maps.

Results: In one patient with ependymoma tractography showed displacement of the fibers, one patient with traumatic spinal cord-interruption of the fibers, two patients with spinal compression-local fiber tracts were compressed, 3 patients with ischemic lesions-insignificant interruption of fibers. In 3 volunteers the white matter tracts were normal. All patients had decreased FA values and increased ADC values at the affected spinal segments (which suggest fiber damage) and relatively normal FA values and ADC values cranial and caudal of the lesion (which suggest that the lesion is much smaller than showed on the conventional MRI).



a

b

a – post traumatic cervical defect seen on T2-weighted image

b – interruption of the fibers seen on tractography

Conclusions: The FA and ADC values offer an objective measure for evaluation of the spinal cord fiber integrity. This method has the potential to demonstrate alterations of white matter tracts, therefore has a great potential with the diagnosis and follow-up of patients with diseases of the spinal cord. The FA and ADC values offer an objective measure for evaluation of the spinal cord fiber integrity.

Keywords: tractography, spinal cord, FA, ADC

Acknowledgements: Grateful thanks to Dr. Maria Moldovanu, Radiologist, Head of MRI and CT department German Diagnostic Center, Chișinău, Republic of Moldova

81. WATERSHED ISCHEMIC STROKE – CLINICAL AND IMAGING PECULARITIES

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Introduction: Watershed Stroke (WS) is a subtype of ischemic stroke, produced at the borderzones of main brain arteries' vascularisation, and has proved to have specific features.

Purpose and objectives: Specific clinical aspects' analysis of WS as a classic ischemic stroke subtype. Determination of specific imaging pattern in patients with WS. Early neurological

manifestations' study in patients with WS. WS risk factors analysis. Study of classic brain CT use in WS diagnosis.

Materials and Methods: 60 patients with ischemic stroke (IS), with male-female ratio= 1:0,86, divided in 2 groups: main group-30 patients with WS, and control group-30 patients with classic IS. Comparative imaging, clinical, and paraclinical features, together with statistic analysis were provided.

Results: Inclusion criteria were the presence of 1 or 2 IS in past with a maximum of 3 years from the onset, the age ranking from 18 to 81, and CT-confirmed IS. Exclusion criteria were concomitant decompensated vascular pathologies, hemorrhagic stroke, and a period of more than 3 years from the first stroke. More frequently IS occurred in the middle cerebral artery territory, and more often it was primary, and bilateral or combined (involving 2 border zones at a time). The neurological deficit was found to be directly proportional with the proximity of the affected cerebral artery. Differences between neurological manifestations were found. In patients with WS they were characterizing generalized brain ischemic suffering (headache- 25,8%, dizziness- 27,3%, vision diminuation-6,6%, phosphenes-19,5%, tinnitus-20,8%). A higher rate of internal carotid artery (ICA) stenosis was found in patients from the main group (46,6% versus 40%), with an evident prevalence for patients with moderate stenosis (41,66% for 51-70% of ICA stenosis versus other degrees of stenosis). The types and morphology of atherosclerotic plaque (AP) also showed differences between those 2 groups: a higher frequency of „hard” (ateromatous) plaques was identified in patients with WS in comparison with those from control group (46,66% versus 43,33%), together with higher rate of calcificates and emboligen potential were found in WS patients. Cerebral lacunarism was found much more frequently in patients with WS, especially in those with ICA stenosis.

Conclusions: Neurological score in patients with WS is directly proportional with the proximity of the cerebral artery that was affected; Primary WS episodes have smaller neurological deficit score; ICA stenosis is a WS risk factor; AP has specific morphology in patients that underwent WS; Cerebral lacunarism development is directly dependent on the stenosis degree, being more frequently associated with WS; Neurological manifestations in patient with WS are specific for cerebral hypoperfusion state; Brain CT allows cortical WS diagnosis, but has some limitations in subcortical WS identification; The relationship between cerebral metabolism's modifications adapted to brain hypoperfusion, are still a domain of further research.

Keywords: Watershed, CT, Atherosclerosis

82. CLINICAL AND BIOLOGICAL FEATURES IN CHRONIC HEPATITIS D

Jaber Samer

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Introduction: Infection with hepatitis D virus (HDV) has a worldwide distribution, but areas of high prevalence include the Mediterranean Basin, inclusively Moldova. Most of the patients have progressive deterioration of liver function and increased risk of liver cirrhosis and end-stage of liver failure.

Purpose and objectives: To evaluate clinical features, paraclinical results and laboratory peculiarities of liver function in patients with chronic hepatitis D, in comparison with chronic hepatitis B patients.

Material and methods: Thirty-six patients, twenty with chronic HDV infection, with median age of 40.2 years, and other 16 with chronic HBV infection, with median age of 43,3 years, were investigated consecutively.

Results: The clinical presentation of patients with chronic hepatitis D shows the predominance of astheno-vegetative syndrome (100%), dull pain in right upper quadrant (83%), hepatomegaly (60%) and splenomegaly (33%). In patients with HDV was found veridical pronounced cytolytic syndrome, manifested by increase of ALT (97.55+8.5 U/l) and AST (78.83+6.2 U/l) compared with control group ($p<0.001$) and patients with HBV ($p<0.05$), also was determined tendency towards reduction of prothrombin and albumin compared with chronic hepatitis B. Research blood count revealed a white blood cell ($3.6+0.57 \times 10^9/l$) and platelet counts ($156.8+10.2 \times 10^9/l$) decreased truthful in HDV versus the control group ($p<0.01$), as well as to patients with HBV ($p<0.05$). In HDV patients we have detected the presence of HBsAg, anti-HBcor and anti-HDV in all patients (100%). HBeAg in 30% of patients,

anti-HBe in 70%. The HDV RNA was found present in all investigated patients with chronic hepatitis D. a low titre of HBV DNA was detected in 5 (25%) patients. Chronic hepatitis D patients had high viral level of HDV RNA, on average of 514038 IU/ml. Most of them had a negative HBV DNA - 76%, and just 24% had parallel HBV DNA and HDV RNA.

Conclusions: In patients with HDV infection was observed a higher frequency of clinical and paraclinical symptoms versus HBV alone, a more evident cytolytic syndrome, leukopenia and thrombocytopenia, ($p < 0.01$). The majority of patients with chronic hepatitis D, have high viral level of HDV RNA, and therefore they require antiviral treatment.

Keywords: Chronic hepatitis Delta, treatment, antiviral

83. THE PREVALENCE OF STAPHYLOCOCCUS AUREUS CARRIAGE AMONGST MEDICAL PERSONNEL AND MEDICAL STUDENTS IN CLINICS FROM THE MUREŞ COUNTY EMERGENCY HOSPITAL

Mitroi Mariana

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Introduction: Staphylococcus aureus is a bacteria that is carried on the skin and in the nose of healthy people on a common basis. Because it can easily acquire resistance to all classes of antibiotics can cause devastating infections in patients that contact the bacteria during their hospitalization.

Knowing the prevalence of the carriage of *S. aureus* amongst medical personnel is important to lower the *S. aureus* infections in inbound patients and also lower the cost and the number of hospitalization days.

Materials and methods: Nasal swabs were collected from each participant using sterile swabs. The nasal swabs specimens were transported to the laboratory and processed within 2 hours of collection. The swab was discharged on blood agar plate and also on manitol salt agar plate, incubated at 37°C and examined after 24h. The Fisher test was used to calculate the relative risk for the patients to acquire an *S. aureus* infection during their hospitalization.

The result of the discussion: From the 177 participants that were involved in the study the *S. aureus* colonization amongst them was of 18% of which 2% is represented by MRSA. Even if these values are not statistically significant ($p = 0.8230$) the knowledge of the carriage on different departments of the medical unit helps improve the medical care.

Conclusion: Even though the MRSA carriage is only 2%, the nasal carriage can be a risk factor for nosocomial infections. It is important to comprehend the status of *S. aureus* carriers especially MRSA to prevent nosocomial infections.

Keywords: *S. aureus*, carriage, MRSA, medical, personnel

84. HEPATORENAL SYNDROME IN PATIENTS WITH CIRRHOSIS

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Introduction: Hepatorenal syndrome (HRS) represents a common complication of severe forms of cirrhosis, characterized by renal failure apparent with no specific cause, which is progressive and theoretical is reversible. After the diagnosis is being established, the probability that a cirrhotic patient would develop a HRS is 18 % in 10 years and 39% in 5 years. SHR develops usually in patients with cirrhosis, frequently with alcoholic etiology and already presents all the severe complications of the disease. The hepatorenal syndrome is a diagnosis of exclusion and is associated with a poor prognosis.

Methods: The study was carried out during a 5 year period (2007-2012). We selected 447 patients with different evolution stages of cirrhosis. The diagnosis was based on anamnesis, clinical

examination, biological explorations and imaging scans. Our study group was analyzed from demographical point of view and also etiological and compensation type. The severity was evaluated with Child-Pugh-Turcotte score, being dosed serum albumin and protrombine time. On the basis of these criteria was elaborated the prognosis.

Results and discussions: The HRS is a frequent complication in cirrhosis evolution. The most common progression of cirrhosis, no matter the etiology or Child score, is to HRS type 2. Death in 6 months usually occurs in patients with ethanolic cirrhosis. It generally emerges in male patients from urban environment. HRS type 2 develops in male with Child C class cirrhosis and is usually followed by death.

Conclusions: HRS is present in the evolution of any patient with cirrhosis, independent of the etiological factors and environment. Child score is not influenced by cirrhosis etiology, but it might complicate the disease during its evolution. With nowadays therapeutical methods, cirrhosis complication succeeded by HRS has a low chance of survival improvement. Death is the most common form of evolution of HRS.

Keywords: Hepatorenal syndrome, ethanolic cirrhosis, death

85. COMMUNITY ACQUIRED PNEUMONIA AND CARDIOVASCULAR COMPLICATIONS

Orlic Anna

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Introduction: Community-acquired pneumonia (CAP) is one of the leading causes of mortality and morbidity, both inside the country and around the world, affecting children, youngsters, adults and the elderly alike. CAP incidence varies throughout the world, 5 to 12 cases being reported per 1000 patients. This number increases significantly in older patients and those debilitated, reaching up to 25-40 in 1000. Cardiovascular complications increase the risk of short-term mortality, reduce the quality of life of these patients and prolong the hospitalization period, hence have as well an economic impact.

Purpose and Objectives: To evaluate the particularities of the clinical course and course for treatment in patients with CAP who developed cardiovascular complications.

Materials and methods: This is a retrospective study that included 68 patients with confirmed CAP admitted to the Municipal Hospital N3 „Sfânta Treime” during the period of 1.01.2013-1.01.2014. The patients were divided into two groups: group I included patients admitted with CAP that developed cardiovascular complications; group II included patients with CAP alone. All the data was statistically processed in Excel, applying Student T Test and *Fisher's exact test* for contingency tables.

Results: During our study we've looked for cardiovascular complications in patients with CAP: new or worsening arrhythmias, new or worsening heart failure, or both. Our study revealed that 17,7% (12/34) of patients we've examined presented with new or worsening arrhythmias, 20,6% (14/34) presented with new or worsening heart failure, and 11,8 % (8/68) presented with both. Following a careful analysis of the acquired data we've established there is a statistically significant difference between the two groups considering the average age of the patients (64.74 ± 12.21 – I group, 49.46 ± 20.58 – II group). Patients from the I group presented more frequently with COPB (50%, 17/34), hypertension (67,7%, 23/34), chest pain (53%, 18/34), heart failure (53%, 18/34). There was a difference in the clinical manifestations of the patients from the two groups. The first group presented with dyspnea in 97% of cases (33/34) vs the second group where dyspnea was reported in 85,3% (29/34). Also patients from the first group presented more frequently with sweating 50% (17/34) vs 35,3% (12/34). It takes longer for the clinical parameters to normalize in patients from the first group. Also the average period of hospitalizations was longer for the patients from the first group ($10,1 \pm 2,3$ days) vs patients from the second group ($8,9 \pm 2,1$ days).

Conclusion: Patients with CAP that developed cardiovascular complications present more frequently with comorbidities that are risk factors for the onset of their cardiovascular

complications. The clinical course of CAP reveals a jumble of symptoms that vary in intensity and severity. The treatment course of this kind of patients is longer and requires special attention, especially in terms of sodium intake. These patients require longer hospitalization and the frequency of short-term death is higher among them.

Keywords: CAP, cardiovascular complications

86. COMMUNITY-ACQUIRED PNEUMONIA IN PATIENTS WITH LOW BODY MASS INDEX

Orlov Victoria

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Introduction: Community-acquired pneumonia (CAP) represents a serious medical and social problem. The criteria that place it among the main respiratory syndromes are high incidence, risk of severe evolution and complications. Some studies about severe CAP suggest that a body mass index (BMI) <18,5 is an important risk factor that influences negatively clinical and paraclinical manifestations of pneumonia. There is lack of data about mild-to-moderate CAP in patients with low BMI.

Purpose and Objectives: Elucidation of etiological, clinical and paraclinical peculiarities of mild-to-moderate CAP in patients with low BMI.

Materials and methods: The study included 60 patients with mild-to-moderate CAP, divided into two groups, the first group included 30 patients with a BMI<18,5 and mean age 46,3±20,4 years and the second one included 30 patients with a BMI=20,0-24,9 and mean age 50,7±17,4 years (p>0,05). The patients were examined clinically, biologically, microbiologically and performed chest X-ray.

Results: The etiological agent was determined in 53,4% of patients with a low BMI and in 73,4% of those with a normal BMI, *Streptococcus pneumoniae* prevailed in both groups. We noticed a number of statistically significant differences between the two groups. The patients with a low BMI had a higher incidence of chest pain (23 (76,6%) vs 20 (66,6%) patients), a longer period of hospitalization due to a slower disappearance of symptoms and signs (10,9±3,6 vs 9,2±2,5 days), a lower percentage of lymphocytes (20,3±7,2 vs 25,5±11,8%), monocytes (6,1±3,4 vs 8,5±3,9 %), a lower number of erythrocytes (3,9±0,8 vs 4,3±0,4, ×10¹²/l), a lower quantity of hemoglobin (116,1±25,2 vs 127,1±14,9 g/l), fibrinogen (3,6±0,7 vs 4,1±1,0 g/l), total cholesterol (3,9±1,0 vs 4,5±1,0 mmol/l) and blood glucose (4,4±0,93 vs 4,9±0,7 mmol/l). There were not significant differences between the groups in localization, extension and resolution of pneumonia.

Conclusion: In our study no etiological and radiological peculiarities of mild-to-moderate CAP in patients with low BMI were found. The patients with a low BMI had a longer clinical course of CAP and a decreased systemic inflammatory response comparing to patients with a normal BMI.

Keywords: Community-acquired pneumonia, low body mass index

87. CLINICAL PROFILE, COMMON THROMBOPHILIA MARKERS AND RISK FACTORS IN 47 YOUNG PATIENTS WITH ISCHEMIC STROKE

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Introduction: Stroke is one of the most common causes of death worldwide, along with cardiovascular pathology and oncology. Hereditary or acquired thrombophilia is often associated with arterial-venous thrombosis. Ischemic stroke caused by thrombophilia has an incidence of approximately 1-4% of total cerebral vascular accidents, with a higher incidence in the period from 45 years old, representing a deficiency of antithrombin, protein C, protein S, factor mutations V Laiding, and associated risk factors.

Purpose and objectives: In the period 2008-2012, a retrospective study was conducted on 47 patients, who have been identified and treated at the county hospital "Nicolae Oblu" from Iasi, Romania. Arterial thrombosis may occur as a result of hereditary or acquired thrombophilia associated with an increase of fibrinogen and dyslipidemia levels, along with the risk factors.

Materials and methods: Of the study was to identify the prevalence of thrombophilia associated to the risk factors, present in case of 47 patients, who experienced at least one episode of arterial thrombosis.

Forty-seven patients from Iasi, older than 45 years, who had at least one episode of ischemic stroke, were studied for three markers of thrombophilia (protein C, protein S and antithrombin III), the plasma levels of fibrinogen and lipoproteins, and risk factors. There were used basic methods of coagulation and the Clauss method for fibrinogen determination. This study included patients who experienced at least one episode of arterial thrombosis until the age of 45 years. Two patients, who are 47 and 50 years old, were included in the study because of the fact that the first episode of ischemic stroke occurred when they were younger than 45 years. We have also taken into account the presence of risk factors, such as smoking, dyslipidemia, family history, etc. The study excluded the patients younger than 45 years, and also other causes of hypercoagulability such as hypertension, liver disease, nephritic syndrome, malignancy, polycythemia, thrombocytosis, contraceptive use, hormone replacement, etc.

Results: There were 47 patients (M / F 18/29) with an average age of 35.6 years (ranging from 18 to 50 years). From a total of 47 patients, 35 had their first episode of stroke, and 12 experienced at least the second one. 21 of the patients showed no abnormalities of the anticoagulation factors, 5 patients had protein C deficiency, 8 of them had protein S deficiency, 5 of them had an antithrombin III deficiency, 11 patients showed increased levels of fibrinogen, and 8 patients had dyslipidemia. Concerning the risk factors, 18 patients were smokers and 6 patients had a family history of arterial thrombotic accidents.

A combination of thrombophilia markers and risk factors was seen in case of 24 of the 47 patients. The prevalence of risk factors: smoking 40%, the increased levels of fibrinogen and lipoprotein, about 17%, and family history 12%. Only two patients have shown a deficiency of anticoagulation markers in case of an experienced episode of cerebral-arterial thrombosis.

Conclusion: The routine testing of fibrinogen could have a positive influence on the early recognition of young patients, who experienced an episode of cerebral-arterial thrombosis, recognition for the deficit of anticoagulation factors, since the presence of thrombophilia markers alone can very rarely be a factor for an ischemic stroke.

Keywords: Ischemic stroke, thrombophilia, protein C, protein S, antithrombin III

88. EXTRAGASTRIC MANIFESTATIONS OF HELICOBACTER PYLORI INFECTION IN ROMANIAN POPULATION

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Introduction: *Helicobacter pylori* (*H. pylori*) is one of the most frequent causes of gastrointestinal infections worldwide. It is known that the immunological response evoked by the bacterium is an important determinant of gastric mucosal damage. Epidemiological studies have investigated *H. Pylori* as a pathogenic determinant of some extragastric disorders due to low-grade inflammatory state, molecular mimicry mechanisms, interference with the absorbance of nutrients and drugs possibly influencing the occurrence or the evolution of many diseases. The main burden of infection is in the developing countries possibly reflecting the presence of geographical variability in the prevalence of both *H. pylori* infection and the considered extradigestive disorders.

Purpose and objectives: The aim of this study is to determine the prevalence of systemic hypertension (HTA), ischemic cardiomyopathy (IC), dyslipidemia, type 2 diabetes mellitus (T2DM) and *chronic obstructive pulmonary disease* (COPD) in a series of patients with *Helicobacter Pylori* infection and explore the possible etiopathogenetic link between them.

Materials and method: A total of 100 participants were divided into two groups according to the presence (n=45) or absence (n=55) of *Helicobacter Pylori* infection. The detection of bacteria was assessed by upper endoscopic gastric biopsies. The presence of HTA, IC, dyslipidemia, T2DM and COPD were investigated in the medical history of both groups.

Results: One hundred patients (47 men, 53 women), aged 30-85 years (the mean 58.1) were included; 55% of patients were positive for *H. pylori* infection. Twenty-two (51%) of patients with *H. Pylori* infection presented HTA, compared to 24 (42%) subjects of *H. Pylori* negative, without semnificative difference between the two groups. ($p=0.65$). The presence of IC was significantly higher (46%) in *H. Pylori* positive group than (25%) of the group without infection ($p=0.003$). Nineteen patients (34%) *H. pylori* positive had T2DM, while 10 patients (23%) were found in the *H. Pylori*-negative group, the difference being statistically insignificant ($p=0.58$). The most frequent extragastric manifestation for patients infected with *H. Pylori* was dyslipidemia (29.7%). The patients with *H. Pylori* had significantly higher levels of dyslipidemia (62%) compared with the non-infected group (25%) ($p=0.002$). Sixteen (25%) cases of COPD were found in *H. Pylori* positive group and 10 (26%) in the *H. Pylori* negative group without reaching statistically significant levels ($p=0.71$).

Conclusion: The association between *H. pylori* infection and ischemic cardiomyopathy and dyslipidemia was revealed in this study. Although some authors found convincing evidence of the involvement of *Helicobacter pylori* as one possible cause of systemic hypertension, type 2 diabetes mellitus and chronic obstructive pulmonary disease, our results have failed to confirm the existence of this etiological association. Hence, the precise processes remain unclear and require further studies.

Keywords: *Helicobacter pylori*, systemic hypertension, ischemic cardiomyopathy, dyslipidemia, type 2 diabetes mellitus, *chronic obstructive pulmonary disease*, epidemiology

89. CLINICAL MANIFESTATIONS, CONTEMPORARY DIAGNOSIS AND TREATMENT OF CHRONIC MYELOID LEUKEMIA

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Introduction: Chronic myeloid leukemia (CML) is a myeloproliferative disorder that results from the reciprocal translocation of the *ABL1* gene on chromosome 9 with the BCR gene on chromosome 22, leading to the formation of the chimeric fusion oncogene. This myeloproliferative malignancy accounts 15–20% of leukemias in adults. The course of CML is triphasic: chronic phase (asymptomatic in approximately 30% of cases) followed by an advanced accelerated phase and/or blast crisis, which may prove fatal. The treatment of CML has evolved over the years and currently includes oral tyrosine kinase inhibitors, immunotherapy and bone marrow transplantation. Imatinib was the first tyrosine kinase inhibitor to be introduced as first-line therapy.

Purpose and Objectives: Evaluation of clinical manifestations, contemporary methods of diagnosis, assessment of therapeutic possibilities and treatment outcomes in patients with CML.

Materials and methods: The study was based on the analysis of the clinical observation sheets of 50 patients diagnosed with CML.

Results: The study included 50 patients aged from 20 to 81 years: 28 men (56%) and 22 women (44%). According to the study, CML starts most frequently at the age of 46-50 years (18%). 46 (92%) patients were diagnosed with CML in chronic phase. Only 3(6%) patients were diagnosed during the acceleration phase and 1 (2%) patient - during the acute phase. 9 (18%) patients were asymptomatic at the moment of diagnose. At least 35 (70%) patients presented a certain degree of splenomegaly; 40 (80%) patients-asthenia, 37 (74%) patients- pressure in the left hypochondrium; 15 (30%) patients- bodyweight loss. 46 (92%) patients received chemotherapy, 37 (74%) patients (74%) were treated with Imatinib. Only 2(4%) patients received Imatinib as a first line therapy. 36 (72%) patients had a complete remission (68% ensured by Imatinib); 14 (28%) patients - partial remission (ensured by conventional therapy). In the first 6 months of treatment, Imatinib determined

CMR in 5 (10%) cases, CCR in 7 (14%) cases and CHR in 22(48%) cases. Only 3(6%) patients experienced a relapse in less than a year after remission with Imatinib. On the other hand,8(16%) patients with conventional therapy experienced recurrence during the same period of time.

Conclusion: The tyrosine kinase inhibitors represent the current most efficient therapy for CML in chronic phase. The treatment discontinuation is almost invariably followed by a recurrence. The introduction of targeted therapy has transformed this disease from an incurable malignancy to a manageable chronic condition.

90. THE EXPERIENCE OF TREATMENT WITH ISOTREXIN GEL IN ACNE VULGARIS

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Introduction: Isotretinoin (13-cis-retinoic acid) is a derivative of vitamin A, being a stereoisomer of tretinoin. Applied topically it has the following actions:1. Regulates the keratinization, reducing the cohesion between the keratinocytes at the level of pilo-sebaceous infundibulum and stratum corneum, promoting and preventing peeling and the appearance of comedones; 2. Determines decrease by 50% of sebaceous gland size; 3. Inhibits the migration of polymorphonuclear neutrophils induced by leukotriene B₄, thus having anti-inflammatory action.

Purpose and objectives: The efficacy and safety of treatment with gel Istorexin in acne vulgaris II-nd and III-rd degree.

Materials and methods: For observations were subjected 30 patients with acne vulgaris II-nd and III-rd degree (12 men and 18 women, mean age 20 ± 4 years). Inclusion criteria according to the degree of acne severity proposed by G.Plewig,M.Kligman,2004: 20 patients with acne vulgaris, II-nd degree: more than 20 comedones, 10-20 papulopustular units; 10 patients with acne vulgaris, III-rd gedree: huge number of comedones, over 21 to 30 papulopustular units , up to 5 nodules.The algorithm of implementation: 1) thorough cleansing of the skin with prior degresation;2) Istorexin gel, 2 times daily, on the affected areas (eight weeks); 3) Cream complementary for excessive dryness of skin.

The drug is not applied on skin with other solutions or other dermatoses (eczema, irritant contact dermatitis, excoriation...). The evidence of morphological features in the focal lesion is made before the begining of the treatment and during the therapy over 1 to 2 months.

Results: At the end of the observation period (8 weeks) was noticed: reduction in open and closed comedones - in the average of 28 ± 1 to 9 ± 1 , reduction of bullous - papulopustular eruptions - from 20 ± 1 to 7 ± 1 ; skin lesions during the conduct of the therapy becomes smooth and elastic. Endpoint (8 weeks): clinical recovery - 15 patients (50%), significant improvement - 8 patients (25%), the total clinical score (recovery + improvement) - 75%. Safety Results Notes: 5 patients (16%) reported a significant subjective sensations of dry skin tension on the face, the indication of moisturizing cosmetic preparations allowed coupling of this state during the 4-5 days without suspension of the gel, this way Istorexin gel was maximal efficient and not led to cases of suspension of the treatment.

Conclusions: The combined topic acne efficacy profile showed a high efficacy (75%) and a maximal safety (in combination with other moisturizing cosmetic drugs) in the treatment of patients with medium and severe forms of acne vulgaris, II-nd and III-rd degree.

Keywords: Acne vulgaris, isotrexin gel

91. ULTRASONOGRAPHIC SCORE FOR NONINVASIVE DIAGNOSTIC OF STEATOSIS IN CHRONIC VIRAL HEPATITIS

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Introduction: Liver steatosis is defined as fatty infiltration affecting greater than 5% of hepatocytes. Liver steatosis is associated with insulin resistance and the metabolic syndrome. Over 90% of patients with nonalcoholic liver steatosis have one or more features of the metabolic syndrome and 30–40% have the full syndrome. The noninvasive methods of detection and quantification of steatosis includes ultrasonography, computed tomography and magnetic resonance imaging.

Purpose and objectives: To establish correlations between clinical, biochemical and imaging parameters in patients with liver steatosis, and to evaluate association between metabolic syndrome and severity of steatosis according to the ultrasonography score.

Materials and methods: The study involved 38 patients with hepatic steatosis determined by ultrasound methods. All patients were evaluated anthropometrically, with biological and immunological methods. The degree of steatosis in all patients was assessed according to ultrasound score *Hamaguchi*. We scored the ultrasonography findings from 0 to 6 points and evaluated the correlation with all components of the metabolic syndrome.

Results: The study involved 38 subjects, 18 men (47%) and 20 women (53%). The mean age was 50.2±12.3 year. A total of 27 patients have had chronic viral hepatitis type C (71%) and 8 patients were infected with hepatic virus type B (21%). Among them, 3 patients have had chronic hepatitis type C and B (8%). The mean waist circumference and body mass index were 89.47±7.70 cm and 28±3.37 kg/m², respectively. We diagnosed liver steatosis of score 2 in 18 (47%), of score 4 in 9 (24%), of score 5 in 7 (18%), of score 6 in 4 (11%) patients. Visceral obesity was diagnosed in 14 (37%) patients. Metabolic syndrome was diagnosed in 23 (68%) of 38 subjects. The correlation between the score and waist circumference was statistically significant, $p < 0,001$. The score significantly correlated with all components of the metabolic syndrome, including waist circumference, blood pressure, fasting plasma sugar, HDL cholesterol and serum triglycerides, $p < 0,001$.

Conclusion: The majority of patients included in this study was infected with hepatic virus C. Ultrasound is widely available, non-invasive and cost efficient method for diagnosis of liver steatosis. In case of patients with chronic viral hepatitis C and B, the ultrasonography scoring system could provide accurate information about hepatic steatosis which correlates with metabolic syndrome.

Key words: Fatty liver disease, ultrasonography scoring system

92. RISK FACTORS, EARLY DIAGNOSIS AND TREATMENT OF BREAST CANCER

Şeremet Aristia

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Introduction: Breast cancer is the most common non-skin cancer in women worldwide. The burden of breast cancer is great, global breast cancer incidence increasing from 641,000 in 1980 to 1,643,000 in 2010, an annual rate of increase of 3.1%. Recently there has been a tendency to estimate a prognostic index, namely the risk of certain persons to develop breast cancer in their lifetime. In Italy the risk of breast cancer for the general female population is 6.3%, in U.S.A.- 10%, and in the Republic of Moldova - 6.6%.

Purpose and objectives: Was to assess the risk factors most commonly met in women with breast cancer and their distribution based on married/single and urban/rural area criteria.

Materials and methods: The trial was completed on 120 patients: all of them women of ages between 26 and 71 years, diagnosed with breast cancer in different stages. We evaluated the patients with a self-made questionnaire based on the topical risk factors; also we studied their patient data sheet and obtained data analysis.

Results: Evaluating risk factors based on married/single criteria we have revealed: a higher incidence of nulliparous women in the single group (50% vs. 1.04%), also, one or more abortions in single women (66,66% vs. 62,5 %), a higher number of smokers in the single group (12,5% vs. 8,33%). Considering the duration of breast feeding, the number of single women who breastfeed for more than 9 months was smaller in comparison to those married (20,83% vs. 63,54%). Besides that, a higher number of married women gave birth to their first child after the age of 25.

Analyzing the data obtained in the rural area/urban area groups, we found that there were more nulliparous women in the urban than in the rural area (15,38% vs. 8,64%). The number of women who had one or more abortions was slightly higher in the urban area (64,1% vs. 62,96%). Women from the city tend to smoke more (12,82% vs. 6,74%). A lower number of city residents give birth to their first child before the age of 25. Also, a lower number of women from the rural area breast feed their children more than 9 months, compared with the women from the urban area (53,08% vs. 58,97%).

Conclusion: Women with breast cancer are under the influence of numerous risk factors, both modifiable and non-modifiable. It is important to assess the influence of these factors and to determine the women exposed to them, in order to begin early screening. Early detection and also diagnosis at early stages is the key to a cost efficient, less traumatizing and sparing treatment, as well as to a higher 5 year survival rate.

Keywords: Breast cancer, risk factors

93. RISK FACTORS FOR ANTI-TUBERCULOSIS TREATMENT DEFAULT

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Introduction: Republic of Moldova reports the biggest incidence of tuberculosis (114,3/100.000), the lowest success treatment rate (52,3%) and the biggest default rate (13%) among European Region countries. Evaluation of risk factors for anti-tuberculosis treatment default values before starting treatment for initiation of reducing risk measures.

Purpose and Objectives: Assessment of risk factors for anti-tuberculosis treatment default.

Material and methods: A selective, descriptive, retrospective study was realized using a total number of 160 new pulmonary tuberculosis cases, divided in a study group (SG) composed by 109 cases which defaulted the treatment and a control group (CG) composed of 51 cases cured at the end of DOTS strategy. Default was used for defining the patients who interrupted the treatment for more than 2 months whatever was the reason. Cured was the patient with converted sputum at the end of the treatment. Computerized analysis was performed with Windows XP and Statistica 10.0. For establishing the degree of risk factors was used Cox regression model. The degree of influence for neutral factor was established Odds Ratio (OR) = 1,0 - 1,1; for OR = 1,2 - 1,6 low risk factor, for OR = 1,7 - 2,5 medium risk factor and OR > 2,6 high risk factor.

Results: Men/women rate 1,8/1, average age 43,8 yrs in SG and men/women rate 2,1/1, average age 48,2 yrs in CG; incomplete educational studies 29 % vs. 30%, OR = 1,1; unemployment 54% vs 74%, OR = 0,9, single status 62% vs 45%, OR = 2,9; active smoking 81% vs 76%, OR = 1,3; alcohol consumption 50% vs 12%, OR = 7,6; drug injection using 5% vs 0, OR = 1,5; low living conditions 66% vs 35%, OR = 3,3; late detection 75% vs 35%, OR = 5,6; associate diseases 66% vs 62%, OR = 1,2; extensive forms of pulmonary tuberculosis 60% vs 45%, OR = 1,9; adverse drug reactions to antituberculosis treatment 13% vs 2%, OR = 1,8; self interruptions during intensive phase of treatment 68 % 2%, OR = 8,7; High risk factors were evaluated : non-

adherent behavior, alcohol consumption, low detection, low living conditions, single status; low risk factors were: extensive tuberculosis, low educational status, smoking, drug using, adverse reaction.

Conclusion: We assessed that the main determinants of treatment discontinuation are social risk factors: low life state, single status, alcohol consumption, low living conditions, correlated with late detection and non-adherent to treatment behavior. All characteristics outline the target group of patients among which must be performed the reducing risk measures for increasing treatment success rate. Other factors as: unemployment, young age, male sex had no contribution to the poor treatment result.

Innovative contribution: We established the targeted risk groups for defaulting for performing the increasing treatment success rate measures.

Keywords: tuberculosis, treatment default, risk factors

94. ANTIVIRAL ACTIVITY OF DIFFERENT FRACTIONS OF NATURAL HUMIC SUBSTANCES WITH RESPECT TO HIV-1

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Introduction: Since 1996, despite the wide application of highly active antiretroviral therapy (HAART), the number of HIV-positive patients continues to grow steadily. More than 30 million people per year get infected with HIV, and more than 3 million die of opportunistic infections on AIDS. An important fact is that all currently used antiviral resistant mutants detected HIV. This shows an urgent need for a directed search for new antiviral drugs against HIV.

Purpose and Objectives: The purpose of this study was to investigate the anti-HIV-activity of humic substances fractions isolated from low-mineralized silt sulfide muds against laboratory strains of HIV-1. The humic substances were isolated from peloids deposited in the region of sanatorium «Sergievsk mineral water», Samara region, Russia. The corresponding HS samples were fulvic, hymatomelanic and humic acids from peloids. The study was carried out with respect to antiviral activity against laboratory strains of HIV-1_{LAL2}.

Materials and methods: Antiviral activity was measured using the screening analysis system inhibitors EASY-HIT developed at the Institute of Virology, Helmholtz-ZentrumMünchen. The study involved two steps: firstly, the screening for antiviral activity of the HS fractions studied was conducted using cell culture LC5-RIC; 2. Secondly, the assessment of cytotoxicity of HS fractions studied was performed using the MTT assay with cell culture of T-lymphoma line KE37.I-IIIb. Antiviral activity was measured by ELISA reader Tecan Infinite M200.

Results: The results showed that all fractions of HS from peloids within the studied range of concentrations (from 0.00125% to 1%) did not display pronounced cytotoxicity. At the same time, the humic acid and hymatomelanic acid fractions exhibited a distinct antiviral activity within the concentration range from 0.0001% to 1% with respect to HIV-1, while fulvic acids did not show this activity. The most profound antiviral activity was exhibited by hymatomelanic acids, whose lowest effective concentration accounted for 3 ng/mL.

Conclusion: The follow up studies on possible mechanism of antiviral activity have shown that the HS samples displayed antiviral activity at the stage of reverse transcription of DNA to RNA. Thus, the fractions of HS of low-mineralized silt sulfide muds can be considered as promising precursors for developing powerful antiviral drugs with low cytotoxicity.

Keywords: antiviral activity, HIV infection, humicsubstances

95. CLINICAL FEATURES AND THE COURSE OF MYASTHENIA GRAVIS IN THE ELDERLY PATIENTS

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Introduction: Myasthenia Gravis (MG) in the elderly is defined as onset after the age of 50 years. The incidence of late-onset MG without thymoma has been increasing in the last 20 years, in the USA and Europe. The increase is mainly found in patients over the age of 50 years. Recent data indicate that MG may still be substantially underdiagnosed in very old people (70 years).

Purpose and objectives: To study the clinical features and the course of MG in elderly patients by performing a clinical trial and reviewing the medical literature.

Material and methods: The clinical trial is based on 14 patients, older than 50 years old, with MG. It is a retrospective study, which included patients with MG, admitted to the Institute of Neurology and Neurosurgery between January 2009 and February 2014.

Results and Conclusions: (1) Late-onset MG is seen more often in men than in women. The female-to-male ratio is near to 3:1 in late-onset MG. (2) Patients with late-onset MG exhibit few distinct clinical features that distinguish them from the early onset. (3) Although the disease activity tends to be lower and the prognosis favorable, they have a higher mortality than patients with early-onset MG, and full remissions are rare. These findings probably relate to the presence of other comorbid conditions in the overall impact of MG in these patients.

Keywords: Myasthenia gravis, elderly, clinical features

96. STUDY OF A FAMILY OUTBREAK WITH ACUTE TYPE A VIRAL HEPATITIS

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Introduction: AVH is characterized by a ubiquitous spread record on all continents around the globe, predominantly in childhood and representing 75-80% of all cases of AVH. According to WHO estimates, over 1,4 million people get sick with hepatitis A each year. Type A Viral Hepatitis is the most common type of viral hepatitis in children, mostly being affected children in communities. In 2013, in our country, it was noted an increase of morbidity of this malady with an increase of incidence in prolonged and severe forms.

Material and methods: It was studied retrospectively 11 medical observation sheets of patients diagnosed with acute hepatitis being hospitalized in IMSP SCRBI „Toma Ciorbă” that are part of a family outbreak. There were tracked dynamically clinical, epidemiological, biochemical and serological data.

Results: The study included 11 patients aged between 2-18 years, diagnosed with Acute Viral Hepatitis, all coming from rural areas of a family. The route of transmission of infection it was assumed to be fluid and habitual. Of those hospitalized, only 5 children are enrolled in community. All children were addressed during the state of the disease. It should be noted that, from all the family members only the children have endured the disease. Clinical manifestations of disease (dyspeptic syndrome, catarrhal syndrome, hepatosplenomegalia syndrome, astenovegetativ syndrome, jaundice) were present in 9 patients. Jaundice was supported by 7 patients. 5 children had the severe form of prothrombin index with the value between 51,3 to 63%. Hypertransaminasemia and significant increase of thymol test was recorded in 10 children, one child showing normal biochemical values at admission and during hospitalization. IgM anti AVH was positive in all patients. Duration of hospitalization varied between 10 and 38 days (average period - 24 days). The prolonged duration of hospitalization was due to the fact that these children had concomitant diseases, as intestinal parasitosis being present in 10 children. The evolution of the disease has been favorable, there were no registered severe complications.

Conclusions: Based on the presented study the following conclusion can be drawn: Acute Viral Hepatitis is a childhood disease, with an increase of morbidity in communities and change in recent years of clinical and evolutive aspects of disease in children. Although there are now possibilities of vaccination against hepatitis A, it was not noticed a decrease in the number of cases with this diagnosis in children in our country. This is due to the fact that the vaccination against hepatitis A is not the subject of a national vaccination program.

Key words: Hepatitis A, family outbreak

97. FATAL CEREBRAL AIR EMBOLISM ASSOCIATED WITH SPONTANEOUS BILATERAL PNEUMOTHORAX IN A PATIENT WITH PAST HISTORY OF PULMONARY TUBERCULOSIS

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Introduction: Post-tuberculous extensive pulmonary fibrosis is among most frequent causes of spontaneous pneumothorax (SP). Simultaneous bilateral SP is an infrequent clinical condition, less than one hundred cases have been described. Occurrence of air embolism is a rare complication of SP, embolism of cerebral vessels being very uncommon. Pathogenesis of cerebral embolism associated with spontaneous pneumothorax is uncertain.

Clinical case: We describe a fatal case of cerebral air embolism in a 43 years old man known with two prior episodes of cured pulmonary tuberculosis. He was admitted to our clinic for progressive dyspnea, during the last 7 days, and left chest pain. At physical exam he was hypotensive with normal heart rate. Subcutaneous emphysema of chest and neck was observed. His chest X ray revealed significant pulmonary fibrosis, secondary to prior pulmonary tuberculosis, bilateral pneumothorax (more expressed on left) and subcutaneous emphysema. Insertion of left chest drain tube was performed. Next day, during manipulation on drain tube, a sudden worsening of patient condition, with a fatal outcome, occurred. At necropsy air pulmonary and cerebral embolism was described. No heart structural abnormalities were found.

Conclusion: Cerebral air embolism is a rare complication of spontaneous pneumothorax, but with a fatal risk. Further analysis of the reported cases could improve the understanding of the mechanism of this clinical condition.

Keywords: Cerebral air embolism, spontaneous pneumothorax, pulmonary fibrosis

98. SCHIZENCEPHALY AND EPILEPTIC SEIZURES: CASE REPORT

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Introduction: Epileptic seizure is an acute episode of stereotypical motor, sensorial and behavioral manifestations, which is caused by the result of excessive and abnormal activity of a neuronal population. The etiology of seizures is multifactorial, thus the modern principles in approaching them include: 1. Thorough clinical assessment 2. Exclusion of triggering factors 3. Establishing the correct underlying disorder with the help of methods like: Cerebral CT- scan, Video EEG, MRI -scan. 4. Conservative or surgical treatment based on the etiology of the process.

Purpose and objectives: To establish the correct underlying disorder with the help of methods like: Cerebral CT- scan, Video EEG, MRI -scan. Deciding whether to choose a conservative or surgical treatment based on the etiology of the process.

Materials and Methods: We report a case of a 34-year old male, diagnosed in childhood with infantile cerebral palsy with moderately spastic tetra paresis, preponderantly on the right side.

The patient has never been investigated with imagistic methods. At the age of 30, he developed first episode of seizure activity and during the following months started experiencing up to 5-6 epileptic occurrences per month. All episodes were partial complex motor in the right hemibody with secondary generalization. He was admitted at the National Scientific-Practice Center of Emergency Medicine for further investigations and treatment. On admission patient was complaining of diffuse headache, weakness in limbs, mostly on the right and walking disorders. The results of the CBC, biochemistry sample, coagulogram and lipidogram and urine, all were within normal limits. The Video EEG trace pointed out focal epileptiform discharges: F-T right, periodically extended P right. CT- scan with contrast consistent with occlusive porencephaly and MRI 3T showed subtotal lack of left hemisphere presented by a cystic defect (141x54x108 mm) communicating with subarachnoid space and ventricular system. Atrophic changes associated with the loss of structural architectonics of hippocampus structure on the left. Schizencephaly. Neurosurgery diagnosed the patient with occlusive hydrocephalus with a gigantic hemispherical cyst on the left with recommendations for endoscopic drainage of cystic cavity with basal cisterns via Stookey Method. The patient underwent the surgery and was started on anti-seizure treatment with carbamazepine 600 mg twice a day.

Results and Discussions: According to the imaging studies, the initial diagnosis of infantile cerebral palsy has been infirmed and the diagnosis of occlusive hydrocephaly with a gigantic hemispherical cyst on the left has been established which was the cause of seizures.

The overall patient's state of health has improved and the seizures episodes have been controlled, and to our knowledge he has developed only 3 episodes of seizures in the past 10 months.

Conclusions: The elucidation of the etiology of epileptic seizures in every particular case using different clinical and imagistic methods is crucial because the efficacy of the treatment and the quality of patient's life depends on it.

Keywords: Epileptic seizures, schizencephaly, cerebral MRI-scan

99. EPIDEMIOLOGICAL ASPECTS OF MULTIPLE SCLEROSIS IN THE REPUBLIC OF MOLDOVA

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Introduction: Multiple sclerosis is a chronic disorder of the central nervous system, manifesting as acute focal inflammatory demyelination and axonal loss, and culminating with chronic multifocal sclerotic plaques. MS involves several nervous functional systems resulting in disability, has a rather unpredictable course, and thus leads to poorer quality of life. It is a disorder of young adults, and the most common cause of non post-traumatic neurological disability. It is considered to be caused by such factors as: genetics factors, vaccines, stress, occupation, climate and nutrition.

Purpose and objectives: To determine the epidemiological aspects of the Multiple Sclerosis in the Republic of Moldova.

Materials and methods: The present work involves epidemiological descriptive studies aimed at disclosing clues to disease clinical state and predominance of this by sex, age, medium and region in the Republic of Moldova. All these were studied at 110 patients using their medical cards and electronic informations. Also a part of them were examined by specific neurological examination and were analyzed by investigations that still continue.

Results: Multiple Sclerosis was diagnosed in 72 (65,45%) men and 38 (34,54%) women. The medium age was approximately 39,73. Also the age, which was frequently affected, is the first 41-50 (31,81%) and the second 31-40 (30%). But, the first symptoms were present at the age of 26-30. In this study were divided patients by the medium- urban -41,81% and rural 58,18%; and also by regions: north- 16%, center -55%, and south-29%. The patients with multiple sclerosis were analyzed by the EDSS (Expanded Disability Status Scale), so we obtained the following results: the maximum percentage -36,36 % (3.5- 5,0) was typical for 40 patients and the minimum 3,63 % (8,5-9,0) – only for 4 patients. The common patterns of MS were categorized as follows: relapsing-remitting- 46,36%,

secondary progressive- 32,72%, primary progressive- 20,90%. Common symptoms of MS include fatigue, weakness, spasticity, balance problems, bladder and bowel problems, numbness, vision loss, tremors and depression. The treatment used was: Interferon/ Rebif-3 (2,72%), Azatioprin/ Imuran- 11 (10%), Mitoxantron- 5 (4,54%), Metilprednisolon- 51 (46,36%), Copaxone/ Glutamirat acetat- 4 (3,36%), plasmopheresis- 9 (8,18%). And one of the important aspect is that from total number of patient 110, only 12 persons (11%) have a job, and go to work everyday.

Conclusion: This project is limited because at the moment, in the Republic of Moldova, approximately 450 persons are diagnosed with MS, but there were analyzed only 110. However, epidemiological aspects showed that MS is an important disease and its evolution depends on the different factors as: age, gravidity of symptoms, sex, medium, region and type of treatment.

Keywords: Multiple sclerosis, central nervous system, demyelination, axonal loss

100. A CLINICO-EPIDEMIOLOGICAL STUDY OF PYODERMA IN CHILDREN

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Introduction: Pyoderma is defined as any purulent skin disease and represents infections in the epidermis and dermis (eg. impetigo contagiosa, bullous impetigo, ecthyma, erysipelas, cellulitis, etc.) or in hair follicles (eg. folliculitis, furunculosis etc). Primary pyodermas are common in children. Environmental factors like overcrowding, hygiene, poverty, malnutrition etc. have been implicated to predispose to pyoderma, especially in children.

Purpose and objectives: To evaluate the epidemiological spectrum of pyoderma in children. To assess the role of predisposing factors. To determine the clinical profile of the cases.

Materials and methods: The study was conducted on a group of 160 patients who were admitted to the Mother and Child Centre, based on medical files of patients.

Results: A total of 160 cases were included. The incidence of primary pyoderma among children aged 0 – 12 years was 1.05% . Maximum cases were seen in the month of July (22%), followed by August (16,25%) . Maximum patients (52%) belonged to the preschool age group while girls constituted 52% of cases One hundred and twenty cases (75%) were from urban areas and maximum cases (63%) belonged to the lower socio-economic class. History of overcrowding was present in (53%) patients while (52%) of cases had poor levels of personal hygiene. Almost half of the patients (46%) had poor nutritional status . Twenty two children (14%), had a positive past history of similar illness. Five cases gave concurrent history of perioritis and 6 cases gave concurrent history of impetigo in siblings. Maximum lesions were in the face followed by lower limb. Most common clinical type of primary pyoderma was bullous impetigo (29.4%). Impetigo contagiosa, bullous impetigo, perioritis, folliculitis and furunculosis all were common in the pre-school age group while majority of ecthyma were in the school going age group Maximum number of bacterial isolates were *S. aureus* (74%), followed by GAS (12,5%). *S. aureus* was the most common bacterial isolate in bullous impetigo, impetigo contagiosa, perioritis, furunculosis and folliculitis. GAS was more commonly isolated from lesions of ecthyma. Out of the 3 cases of cellulitis, GAS was found in two cases and *Pseudomonas aeruginosa* was isolated in the third.

Conclusion: Pyodermas cause significant morbidity in children and frequently cause much anxiety in parents. Environmental, socioeconomic and nutritional factors may have a compounding effect on development of pyoderma in children.

However, futher studies are required to find out the statistical association between these factors and pyoderma.

Keywords: Primary pyoderma, children, predisposing factors, bacterial isolate

101. DYSFUNCTIONAL BREATHING PATTERN IN PATIENTS WITH CHRONIC PAIN (MIGRAINE AND LOW BACK PAIN). A CLINICAL AND PHYSIOLOGICAL STUDY.

Botea Olga

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Introduction: Respiration is a physiological function situated strategically at the interface of mind and body. It is capable of operating automatically, but it can be brought under voluntary control. Changes in breathing pattern induced by chronic pain are a controversial subject of many researches in the psychophysiology of breathing. Interactions between emotional states, respiratory behaviors (such as fast and deep breathing, strained breathing, inhibited breathing) and physiological changes at the level of chemical blood composition and autonomic nervous system regulation play a role in disorders such as dysfunctional breathing syndrome, panic disorder, functional cardiac disorder, and chronic pain syndrome.

Purpose and Objectives: The influence of pain on the breathing pattern in patients with chronic migraine and chronic back pain.

Materials and methods: The study is based on 3 groups of subjects, 20 in each of groups: patients with chronic migraine (group 1), patients with chronic low back pain (group 2) and healthy subjects (group 3). Besides clinical and psychological tests, we used respiratory inductance plethysmography to measure volumes, times, frequency and thoracoabdominal asynchrony in different assays (in rest, apnea, hyperventilation, pain provocation with a cuff).

Results: In comparison with healthy subjects, patients with chronic pain have lower inspiratory volume ($p < 0.05$), lower inspiratory ($p < 0.01$) and expiratory ($p < 0.05$) times and a faster breathing ($p < 0.01$) in following assays: regular breathing, post apnea, and post hyperventilation. Also we found differences in breathing pattern between patients with chronic migraine and chronic low back pain. Patients with migraine, in rest have an abdominal breathing but those with low back pain breath thoracically ($p < 0.001$). After hyperventilation the pattern of the patients with chronic migraine and chronic back pain, was identical as in rest breathing, otherwise the amount of the asynchrony was more important ($p < 0.01$). We also noticed that after the pain test patients with low back pain had lower inspiratory volumes ($p < 0.05$) and shorter inspiratory times ($p < 0.05$).

Conclusion: There are significant differences of breathing pattern in healthy subjects and patients with chronic pain, in rest breathing as well as in specific assays (apnea, hyperventilation, pain). Otherwise, the breathing pattern of patients with chronic migraine and chronic low back pain also differs, most common at thoracoabdominal asynchrony.

Keywords: Breathing pattern, chronic pain, migraine, low back pain, dysfunctional breathing

102. THE COMPARISON OF NEUROIMAGING CHARACTERISTICS OF CHRONIC PAIN IN MIGRAINE TO CHRONIC LOW BACK PAIN THROUGH FUNCTIONAL MRI

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Introduction: Despite the high frequency of migraineurs in the general population, the pathogenesis of this disorder is still unclear. There is a great need for a better understanding of the mechanisms underlying the pain, the accompanying symptoms, as well as the premonitory symptoms and the aura.

Purpose and objectives: Highlighting the clinical and clinical-neuroimagic correlations in patients with chronic migraine and chronic back pain and to prove that chronic pain causes morphological and functional changes that occur in the brain.

Materials and Methods: The choice of methods and interpretation of results is guided by recent neuroimagistical research (functional MRI) that expounds on the involvement of different

neural systems and brain structures in the pathophysiology of migraine. In the current research we are taking into account the latest results of neuro-imaging studies in recent years, published in international literature, which proves the presence of structural and functional brain changes in patients with chronic pain.

Results: All studies regarding chronic pain suggests that central plasticity concept is the way in which we can understand chronic pain, demonstrated in vivo using functional imaging. MRI demonstrated a loss of gray matter in patients with chronic pain (taking into account age and sex), some studies have shown that structural lesions occur in specific areas, these changes were different for different syndromes but the process of cortical reorganization was the same. Remember that the most common locations of the lesions that occur in chronic pain are: cingulate cortex, orbito-frontal, insular, dorsal-side deck, thalamus, suggesting a common basis. So we're talking about a system that is not isolated but that correlates and is influenced by the level and spinal nociceptive system. In future, studies should take into account that plasticity is the dynamic interaction of nociceptors and higher cognitive functions, immune system, endothelial cells and fields receptive. There is no evidence to conclude that the injuries are caused or are a consequence of chronic pain, but it constantly suggests that morphological changes are determined by constant pain.

Conclusion: Advanced neuroimaging methods have helped us to unravel a new understanding of how chronic pain alters brain structure, function, and neurochemistry. The altered structure and function of selected brain structures, could constitute a basis for new diagnostic strategies and a measure of therapeutic efficacy.

Keywords: Chronic pain, fMRI, neuroplasticity, migraine, chronic low back pain, gray matter

103. EVOLUTIVE PARTICULARITIES OF GASTROINTESTINAL STROMAL TUMORS (GISTS)

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Introduction: GISTs are the most common mesenchymal tumors specific to the GI tract, generally defined as KIT CD117 and CD34 positive tumors with specific histological features. They derive from Cajal cells or their precursors, most commonly occur at the age >50 years in the stomach, small intestine, rectum and colon <10%, and less than 5% in esophagus, and can be malignant or benign. The symptomatology is non-specific, being diagnosed by the complications: hemorrhage, intestinal obstruction or perforation.

Materials and methods: We have selected 10 cases of GIST hospitalized in the last four years with the same evolutionary feature: an acute complication that required emergency intervention. A positive diagnosis was established with postsurgical immunohistochemical tests, using antibodies antiCD117, CD34, Ki67 and vimentin.

Results: GIST were recently defined as a separate histopathological entity and therefore, there is no standard protocol for its diagnosis and treatment. In 70% of cases the clinical signs are present the rest being asymptomatic discovered within a complication with intra/extra luminal bleeding, perforation or occlusion. Presurgical histopathological confirmation is not mandatory due to a high risk of dissemination and hemorrhages. Our 10 cases started with an acute complication that needed an emergency surgery: 8 with upper GI bleeding, 1 perforation, 1 occlusion. The diagnosis was established using immunohistopathological examination with antibodies anti CD117, CD34, actin and vimentin. According to the mitotic index (Ki67+) and tumor size we have included them in Fletcher classification of malignancy evolution. The GIST evolution is unpredictable and requires an oncological monitoring of all patients.

Conclusions: GISTs are part of intestinal mesenchymal tumors that can clinically evolve with a complication such as: occlusion, bleeding and perforation. The immunohistochemical test are necessary in order to establish a positive diagnosis and prognosis. The surgical act is the only treatment and followed by a long observation by oncologists.

Keywords: GISTs, evolution, acute complications, markers

104. MODERN APPROACH TO EPILEPSY TREATMENT

Cebotari Inga

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Introduction: Long regular use of antiepileptic drugs aimed at reducing frequency of seizures or stopping them completely without any significant side-effects is by far the main principle of epilepsy treatment. Attention is drawn to the issues of tolerability of antiepileptic therapy and compliancy, mutual understanding between the physician and the patient.

Purpose and Objectives: To determine the response to treatment of patients presenting with different types of seizures and the possibility of efficient therapeutic care of patients with epilepsy.

Materials and methods: This study is based on retrospective analysis of medical documentation of patients hospitalized in IMSP SCP. The study group was represented by 36 patients (19 men and 17 women) diagnosed with epilepsy.

Results: During this study, we have evaluated the response to antiepileptic treatment given to patients presenting with different types of seizures. 21 patients (58%) had polymorphic seizures and 15 patients (42%) generalized tonic-clonic seizures. 26 patients (72%) received monotherapy and 10 patients (28%) were treated using polytherapy. Carbamazepine was used as monotherapy in 88% (23 patients) and valproate in 12% of the cases (3 patients). The polytherapy included double-therapy in 25% of cases (9 patients) and triple-therapy in 3% of the cases (1 patient). As the end result of the treatment in patients with epilepsy, we have obtained an adequate control of seizures (absence of seizures) in 36% of the cases (13 patients). A reduction of seizures' frequency by more than 50% was observed in 36% (13 patients) and the seizures' frequency was unchanged in 28% of the cases (10 patients). Reported treatment failure was most likely due to the short term of treatment, although refractory epilepsy in these patients is not excluded. Analyzing the adherence to treatment in ambulatory conditions, we found that 24 patients (67%) complied with the recommendations and continued treatment at home, while 12 patients (33%) dropped out of therapy.

Conclusions: The study shows that polymorphic seizures are better controlled by monotherapy (37.5%-complete control) versus polytherapy (16.6%-complete control), whereas generalized tonic-clonic seizures show positive response to polytherapy (50%) versus monotherapy (30.7%). Polymorphic seizures have a good response (reduction of >50% of seizures' frequency) with polytherapy (50%) versus monotherapy (37.5%), whereas generalized tonic-clonic seizures, show similar response to both monotherapy and polytherapy. We've concluded that polymorphic seizures have a better response to treatment when compared with generalized tonic-clonic seizures, both in monotherapy and in polytherapy.

Keywords: antiepileptic drugs, efficacy of therapy

105. FEATURES OF PULMONARY TUBERCULOSIS DEPENDING ON THE METHODS OF SCREENING

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Introduction: Epidemiological indicators of tuberculosis in R. Moldova falled down during the period 1970-1990 (from 97/100.000 in 1970 to 39,6/100.000 in 1990), due to the improvement of general economical state of the country and active screening of tuberculosis. The most important role in detection was released to medical radiophotography, so called fluorography performed annually to the entire population. By microbiological method were detected only 37% of TB patients. Socio-economical challenges started in 1990 changed the roles of screening metods. Implementation of DOTS strategy imposed the detection by passive way (microbiological method) at least 70% of TB patients and only 30% cases from risk groups were detected radiologically. As a result: increased the number of new detected cases with severe TB, decreased succes rate and increased mortality rate.

Aim: Assessment of pulmonary tuberculosis depending on the methods of screening.

Material and methods: Were assessed socio-economical, epidemiological and clinical features of 306 cases with pulmonary tuberculosis, divided in a study group (SG), composed of 242 patients, detected by passive way (investigation of symptoms) and a control group (CG), composed of 64 patients detected by active way (radiologically).

Results: Gender distribution assessed the predominance of men in both groups 2,41/1 in SG and 1,67/1 in CG, ($p < 0,01$), with the same average age $1\ 38,98 \pm 12,83$ years in SG and $40,35 \pm 13,58$ years in CG. Socio-economical evaluation revealed the same conditions in both groups: urban residenship 73,55% vs. 64,06%, unemployment 72,72% vs. 82,81%, single civic state 48,76% vs. 68,75% ($p < 0,05$), incomplete school level 24,79% vs. 31,25%, bad living conditions 54,54% vs. 43,75%. Tuberculous contact was established at the same scale in both groups 35,96% vs. 41,90%. Clinical assessment estimated more precarious indicators for passive detected group: detected by family doctor 97,10% vs. 79,69% ($p < 0,05$), late detected (more than 1 month from the onset) 69,01% vs. 34,38% ($p < 0,001$), with bilateral pulmonary localisation of specific process 67,35% vs. 24,36%, ($p < 0,001$), extended to more than 3 lung segments in 97,35% vs. 35,67%, ($p < 0,001$), complicated with hemoptysis in 5,78% vs. 1,25% cases.

Conclusions: Modification of screening methods according to WHO recommendations directly contributed to the increasing of late detected, bilateral extended pulmonary tuberculosis, worsened by specific related complications. We alert on the precarity of TB patients: unemployment, uncompleted school level, bad living conditions. The predominance of married patients in active way detected group, emphasizes the role of the family support in motivation of patients to perform radiological investigations for checking the status health. Low rate of tuberculous contact investigations in active detected group demonstrates the unsatisfactory active screening realized in epidemiological focuses.

106. CLINICAL, MICROBIOLOGICAL AND RADIOLOGICAL FEATURES OF SEVERE INFILTRATIVE PULMONARY TUBERCULOSIS WITHIN DOTS STRATEGY

Chirita Olga

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Introduction: Epidemiological state of tuberculosis in Republic of Moldova rests tensioned, with insignificant deviation. Global incidence of tuberculosis (new cases and relapses), registered in 2011 is 114,3/100.000 populations, 37,4% of cases been very contagious, 38,0% with extensive destructions. In 2001 our country adopted DOTS strategy, recommended by World Health Organization in the control of tuberculosis, engaging the detection of least 70% of new cases of pulmonary tuberculosis by microscopy of the smear. As consequence, increased the rate of extensive tuberculosis with bilateral localizations, with lung destructions and dissemination, with vital complications, followed by the reduction of treatment success rate and increased of early mortality rate.

Purpose and Objectives: Assessment of clinical, microbiological and radiological features of severe infiltrative pulmonary tuberculosis within Directly Observed Treatment Short course chemotherapy strategy.

Material and methods: A total amount of 95 new pulmonary severe forms of tuberculosis were investigated, including gender and age features, clinical aspects, microbiological results of Ziehl Neelson staining, culture on Lowenstein Jensen medium and drug sensibility testing, diagnostics of co-morbidities and results of blood count.

Results: Men /female rate 1,5/1, average age 42,6 yrs, 68% were late detected (complaining more than 3 month from the onset), by general practitioner through the passive way. Intoxication sings revealed were: asthenia 99%, loss of weight 96%, loss of appetite 78%, nights sweats 67%, vesperal fever 45% cases. Broncho-pulmonary signs were established: cough 100%, muco-purulent expectorations 100%, thoracic pain 34%, hemoptysis 26% cases. Co-morbidities had 40% cases. Radiological aspects were established: bilateral localizations in 78% cases, extension to more than 3

pulmonary segments at 96% cases, all being in evolution phase, with destructions 98% and bronchogenic dissemination 87% cases. Microbiological analysis established smear positive results for Ziehl-Neelson staining in 83% cases, Lowenstein-Yensen culture being positive in 84% cases, showing any resistance to the first anti-tuberculosis drugs in 34% cases.

Conclusions: Assessment of clinical, microbiological and radiological features of severe infiltrative pulmonary tuberculosis within DOTS strategy revealed its predominance in male sex, in economically and reproductible age. Late detection by passive way, with well defined clinical signs, showing bilateral and extensive lung localizations, with high degree of bacilli emission, confers continuous epidemiological danger on health population. All enumerated characteristics are the consequence of the implementation of DOTS strategy in the control of tuberculosis in our country.

Innovative contribution: For the first time in R. Moldova was established the features of severe pulmonary tuberculosis, according DOTS strategy.

Keywords: tuberculosis, DOTS, management

107. CHRONIC LOW BACK PAIN. FACTORS OF CHRONICITY. LIFE QUALITY OF PATIENTS

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Introduction: Low back pain is the most common suffering which affects all ages and all sections of the population. It is considered that in over 80% of cases it is not known the precise cause and pathogenesis of symptomatology. It is correlated with an increased incidence of low back pain in certain sports, static load disturbances and even psychogenic stress, dissatisfaction, depression, anxiety.

Purpose and objectives: was to assess risk factors for low back pain, like bio-psychological factors.

Materials and methods: The trial was completed on 62 patients: the basis lot with chronic low back pain - 30 patients, the comparison lot with acute low back pain - 18 patients, the control group - 14 healthy people. Clinical evaluation of patients (medical history, objective, neurological status exam), evaluation of pain intensity through Visual Analogue Scale. Competency testing: Roland Morris Disability Questionnaire; Back Performance Scale; Beck Depression Test; Spielberger Anxiety Test.

Results: The evaluation risk factors of the patients with chronic low back vs. those with acute low back pain was observed: in 20% of cases the pain is aggravated by physical effort, 6,7% of cases-in the upright position, 10% of cases-long walks, 3,3% of cases-at the beginning of walking, but in 60% of cases factors that would lead to aggravation are stress, depression. Beck test data proved that 94% of surveyed patients suffer from some degree of depression, which is in full accordance with the literature. Patients with chronic low back pain proved statistically relevant by those with the presence of a acute low back pain by high levels of depression in their personal life (6.6% vs 0%), as well as moderate depression level was raised for them, but statistically insignificant (36.7% vs. 33.3%). The most common comorbid disorders for chronic and acute low back pain were studied: the most important comorbidities of chronic low back pain are affective disorders (anxiety, depression, phobias, etc.), being statistically more significant in patients with chronic low back pain in relation to patients with acute pain (80% vs. 61,1%), followed by algic comorbidity (76,6% vs.72,2%), sleep disorders (73,3% vs. 22.2%) and decreased appetite (36.6% vs. 17.1%). Chronic syndromes localized at the level of the joints, abdomen and superior limbs have distinguished groups of patients with chronic and acute low back pain conclusively.

Conclusion: Patients with chronic pain have expressed a higher degree of depression and personal and reactive anxiety than patients with acute pain and subjects in the control group.

Keywords: Chronic low back pain, chronicity factors, quality of life

108. INTEROCEPTIVE DISORDERS IN PATIENTS WITH DIABETES MELLITUS

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Introduction: Interoceptive is the body's ability to perceive visceral sensations and physiological state, and can directly or indirectly influence awareness and behavior. Diabetic autonomic neuropathy is among the least known and understood complications of diabetes, despite significant negative impact on quality of life and of causing neurovegetative disorders. Internal body state has an extensive influence on brain function and mental activity, including affective state. Determining a correlation between the autonomic nervous system, interoceptive and affective state, we can understand the effect of chronic diseases, like diabetes, on the perception and mental state of the patient and vice versa.

Purpose and Objective: The detection of neurovegetative disorders in patients with diabetes and their influence on interoception as well as the emotional state.

Materials and methods: In this study participated 40 patients with diabetes mellitus in association with polyneuropathy - DZ and two reference groups: 10 healthy individuals as control group- S and 20 patients with chronic migraine -M. All of them were women. For the study of interoception we used Stephen W. Porges BODY PERCEPTION questionnaire, Ph.D. 2003, modified, shortened to 50 questions. Motor autonomic profile (PVM -2 prof. Ion Moldovanu) to determine neurovegetative disorders. Additional scale represents an interpretation of data extracted from PVM, which refers to bodily sensations (interoceptive and exteroceptive) and affective disorders. Symptoms of anxiety and depression were screened using the Hospital Anxiety and Depression Scale (HADS).

Results: (1) Hypertension and low blood sugar prevail in patients with diabetes compared with reference groups (M and S) ($P < 0.05$). (2) Influence of chronic migraine on the occurrence of menstrual disorders is higher than that of diabetes ($P < 0.05$). (3) Patients with diabetes compared to healthy people, have a higher number of symptoms related to cardiovascular dysfunction in subscales: visceral interoception, visceral pain, musculoskeletal interoception, musculo-skeletal pain ($P < 0.05$). (4) Affective disorders in patients with diabetes are more expressed compared to healthy individuals ($P < 0.05$). (5) HADS scale results showed that the impact of interoceptive disorders on anxiety is as significant as the influence of anxiety on the ability of perception.

Conclusion: In this study we determine a correlation between interoceptive disorders and affective disorders. It can be assumed that the intensification of perception of bodily sensations in patients with diabetes occurs through the affective disorders.

Keywords: Interoception, diabetes mellitus, autonomic disorders, anxiety, depression

109. THE TREATMENT OF PAIN TO ONCOLOGICAL PATIENTS

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Introduction: Cancer pain may be due to the disease itself or can result from the treatment, including surgery, radiation therapy and chemotherapy. Although usually occurs relatively late in the natural history of the disease, the most common symptom is pain in the cancer present in 30-40% of patients at diagnosis from 40-70% to 70-90% at baseline and during phase terminals. The prevalence of pain depends on the type of tumor, ranging from 52% in patients with lung cancers and up to 5% in patients with leukemia.

Purpose and Objectives: The evaluation and appreciation of chronic pain in oncological pathology

Materials and methods: The study conducted on a group of 50 patients from October 2013 to January using the Brief Pain Inventory (BPI).

Results: The group studied consisted of women 44%, men 56%. BPI is a numerical scale of 0-10 assessing the degree of pain interference with the normal activities of the patient which it applies, to which is added information on the gradation of the pain, the pain at the time of examination. Starting from the order established after evaluation of maximum intensity of the pain score 6-30%, followed by the score 8-15%, scores 9 and 10 - 10-12%. When assessing the minimum level of pain intensity score of 2 to 23% and score 4 to 20 %, which ranks the most frequently encountered in patients investigated. Usual level of pain intensity score highlights the prevalence of 6 and 8 with 20%, followed by the score 5 to 18%, the other scores were determined from a minimum of patients. Depending on the type of treatment: 79% were receiving chemotherapy, chemo-radiotherapeutic treatment 5%, hormone therapy 2% and unspecified 14%. According to the step by step antalgic treatment, elaborated by WHO: analgesic stage administered -7% stage I, stage II- 23% and stage III - 70 %.

Conclusion: Analyzing all the features of chronic pain by using the BPI questionnaire in the study of cancer patients, we determined that although in theory the current therapeutic methods and applying rational (WHO principles) would allow excellent results in almost 95% of patients, but cancer pain remains untreated satisfactory in many situations

Keywords: Pain, score

110. HODGKIN LYMPHOMA AND SECONDARY METACHRONOUS TUMORS

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Introduction: Hodgkin lymphoma is a malignant tumor of the lymphatic system. Hodgkin's disease occurs predominantly in young adults and is one of the most curable malignancies. With current treatment approaches, most patients achieve a lasting complete remission, but there is a high risk of developing in these patients' secondary malignant tumors, and the mortality is associated with both radiotherapy and chemotherapy.

Purpose and objectives: Researching metachronous malignancies in patients with Hodgkin lymphoma and studying the frequency of their occurrence, depending of the age, sex, clinical stages, histological forms, the administrated treatment for Hodgkin lymphoma and also the time period for developing secondary malignancies.

Materials and Methods: Our study is based on 53 patients diagnosed and treated for Hodgkin Lymphoma in Oncological Institute of Republic of Moldova, all the patients where in complete remission when they developed secondary malignancy. In our study where 22 men and 31 women, with ages between 4 and 81 years.

Results: According to our study the number of patients diagnosed with Hodgkin's was the highest in the age of 11-21 for women (24,5%) and 21-31 for men (24,5%). The mix cellular form of tumors was the most frequent (43,39%). The metachronous tumors are mostly revealed in the stage IIA (39, 62%) of the disease. Our research carried out that there is a prevalence of a combined chemo-radiotherapy method of treatment (52.83%). The maximum risk of developing secondary metachronous tumors occurs over 11 to 20 years (46%), and the most frequently diagnosed tumors where lung cancer (22,64%), gastric cancer (16,98%), breast cancer(13,20%).

Conclusions: After treatment for Hodgkin's lymphoma in patients may develop secondary metachronous tumors that occur more frequently in women aged 21-40 years at diagnosis of Hodgkin lymphoma. Metachronous secondary tumors are identified mainly in patients diagnosed with stage IIA Hodgkin lymphoma, histological variant most commonly diagnosed as mixed cellularity. The method of treatment was chosen for the majority of patient's chemo-radiotherapeutic. Period of development of secondary tumors is 11-20 years after treatment for Hodgkin's lymphoma. Secondary malignancies after Hodgkin Lymphoma can have different location.

Keywords: Hodgkin Lymphoma, secondary metachronous tumors

111. THE INCIDENCE OF INFLAMMATORY BOWEL DISEASE IN MOLDOVA**Dabija Svetlana***Academic adviser: Podgurschi Lilia, M.D., Ph.D., associate professor, State University of Medicine and Pharmacy "Nicolae Testemițanu", Chișinău, Republic of Moldova*

Introduction: Inflammatory bowel disease (IBD) is one of the most difficult and complex problems of modern gastroenterology. From the epidemiological point of view, IBD is less common than other gastrointestinal diseases, but their impact is major medic- social, due to several evolution, imperfect therapeutic approaches and their tactics applied. Moreover, during the last decades of IBD tends to spread in different regions of the world, including Central and Eastern Europe and Asia.

IBD are chronic diseases and clinical manifestations and peculiarities of their development are very different. In most patients relapsing disease is evolving, involving new areas of inflammation and complications. The progressive nature of the disease requires treatment in active disease during the treatment and maintenance of remission. This therapy has the goal preventing relapse and prevention of complications.

Purpose and objectives: Determination of spread of BII in Moldova depending on age, sex, occupation and risk factors.

Materials and methods: To achieve the set goal and tasks in this paper were examined by statistical method returns clinical observation of 50 patients with inflammatory bowel disease (non-specific ulcerative colitis - 48 patients, Crohn's disease - 2 patients) in the republican clinic of gastroenterology during 2013. The patients' age ranged from 20-80 years, from them – 25 (50%) patients were men and 25 patients (50%) - women. Patients were divided by age, sex, occupation, demographic indicators.

Results and discussion: Classification according to age demonstrated that patients aged 20-40 years were 18, which corresponds to - 36%, aged 40-60 years were -23 patients, corresponding to 46%; and 9 patients aged 60-80 years (18%). In patients aged 20-40 years suffering predominantly men - 12 patients (66,6 %) women 6 patients who were respectively, 33,3%. In patients aged 40-60 years the situation is reversed, men constituted- 8 patients (34,8 %), and 15 patients women- corresponding to 65,2%. In patients aged 60-80 years this ratio almost equals 4 patients are women (44,4 %) and 5 male patients (55,6%).

Study of disease distribution by regions, the high frequency observed in the central region - 34 patients, representing 68%, in the northern region - 12 patients (24%) and in the south of Moldova-4 patients, which corresponds to - 8 %. Area of residence did not influence the development of disease, as in both rural and urban areas both indexes were identical).

Distribution of patients by type of activity has shown that IBD is rarely found among the unemployed -six patients (12%), equally intellectuals and workers in agriculture and industry each - 8 patients (16 %), pensioners were - 9 patients (18%) and most common among the ranks of invalids, being detected in 19 patients (38%).

Most patients, 29 of them (58%) had a normal body mass index, and 16 patients (32%) had a weight loss characteristic of the disease once. Body mass index was increased only in 5 patients (20%). Smoking patients were -32 (64%), 7 patients (14%) were smokers before the occurrence of the disease, and 11 of them (22%) continue to smoke. No alcohol or very rarely used - 26 patients (52%), were used in moderate amounts - 22 patients (24%), alcohol abuse presented 2 patients (4%).

Conclusions: (1) Frequently suffer from pathology concerned middle-aged population. (2) Patients in both rural and urban areas suffer from this disease the same. (3) Not determined any correlation between risk factors (increased body weight, smoking, alcohol consumption) and the development of inflammatory bowel disease.

Keywords: Inflammatory bowel disease (IBD), spread of IBD

112. HEPATIC AND EXTRAHEPATIC MANIFESTATIONS IN PRIMARY BILIARY CIRRHOSIS

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Introduction: Primary Biliary Cirrhosis is a chronic progressive cholestatic disorder of unknown etiology, pathogenesis, characterized histologically by autoimmune inflammation of the biliary ducts interlobular septal and intrahepatic granulomatous destructive, associated with the presence of antimitochondrial antibody, cholestatic jaundice and pruritus. Primary biliary cirrhosis is $\approx 0,6-2\%$ of deaths from hepatic cirrhosis. Caution is required for diagnosis in women of average age with cutaneous pruritus, jaundice, steatorrhea and skin pigmentation.

Purpose and objectives: The study of hepatic and extrahepatic manifestations in primary biliary cirrhosis.

Materials and methods: Retrospective study of 40 patients hospitalized in Hepatology section of Republican Clinical Hospital was performed. 37 women (92.5%) and 3 men (7.5%) with a mean age of 47.7 years were included.

Results: Typical hepatic manifestations of primary biliary cirrhosis were: hepatomegaly (34 patients; 85%), splenomegaly (21; 52.5%), skin jaundice (20; 50%), pruritus cutaneous (22; 55%) and asthenia (30; 75%). As extrahepatic manifestations were detected: osteoporosis (4 patients; 10%), arthralgia (7; 17.5%) and pneumosclerosis (7; 17.5%). Conditions associated with primary biliary cirrhosis were: thyroid diseases (6 patients; 15%), rheumatoid polyarthritis (4; 10%) and diabetes mellitus (5; 12.5 %). Biological markers associated with clinical features were: antimitochondrial antibodies (32 patients; 80%), antinuclear antibodies (8; 20%), rheumatoid factor (6; 15%) and cryoglobulins (3; 7.5%).

Conclusion: In primary biliary cirrhosis classic symptoms (cutaneous pruritus, jaundice, hepatomegaly, splenomegaly and asthenia) may be associated with extrahepatic manifestations as: osteoporosis, arthralgia, pneumosclerosis, diabetes, rheumatoid arthritis and thyroid affectation.

Keywords: Primary biliary cirrhosis, pruritus, extrahepatic manifestations

113. DIAGNOSIS AND TREATMENT OF THE CENTRAL TYPE OF SLEEP APNEA SYNDROME

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Introduction: The diagnosis and treatment of sleep disorders require special attention because they can have serious psycho-behavioral, cardiovascular, metabolic consequences and can influence the intellectual performance and social relationships. The central type of sleep apnea syndrome represents a set of signs and symptoms caused by stops (apnea) or slow downs (hypopnea) of respiratory flow during sleep caused by central nervous system disorders (respiratory center) with a frequency of more than 5 episodes per hour and lasting more than 10 seconds. Considering the consequences it has on the body, the SAS diagnosed patient requires a multidisciplinary approach: ENT, pneumology, neurology, cardiology, and psychiatry.

Materials and methods: Relevant articles on the topic for the period from 2000 to 2014 were analyzed, using PubMed data base and other sources.

Results: The central type of sleep apnea syndrome is found more often in patients with heart failure, of which 20-30% at the patients with systolic heart failure. 10% of all patients with sleep apnea syndrome, registered at the study of sleep laboratories, present central type of apnea. (PSG) is the most informative and base method in diagnosis of sleep apnea, fact confirmed by practice. The best method of treatment has proved CPAP-therapy (continuous positive airway pressure). In the modern treatment is used auto-CPAP-therapy witch allows automatic recording and dosing of the inspired air flow.

Conclusion: We determined the following aspects:

1. The central type of sleep apnea syndrome is very dangerous to patients' lives caused by the mechanism of production and more complications after hypoxia;
2. Polysomnography represents the screening of the central type of sleep apnea syndrome;
3. Auto-CPAP-therapy and CPAP-therapy are the most effective methods of treatment.

Keywords: sleep disorders, sleep apnea, central type of apnea

114. CLINICAL AND THERAPEUTIC ASPECTS OF MALIGN MELANOMA

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Introduction: Malignant melanoma (MM) is the most aggressive skin cancer, which develops through malignant transformation of melanocytes. The number of MM cases worldwide has increased faster than any other cancer in recent decades. MM is the fourth most common cancer among males (after prostate, bowel and lung cancers) and the third among females (after breast and bowel cancers). It accounts for about 50 new cases per 100,000 population each year. In RM 80-90 new cases of MM are recorded annually. The major problem of the health system is the tardive revelation of patients who show specific changes of the skin, leading to late treatment and negative prognosis.

Purpose and objectives: The main objective of this thesis is to study the incidence, the most common causes, the results of the performed treatment in relation to cancer recurrence, and the prognosis of patients which addressed to the M.P.S.I. Institute of Oncology from R.M. during 2013 year.

Material and Methods: The study described in the present paper is observational-descriptive (study variations in the distribution of disease in the population), according to the investigational volume - limited study (research a part of "statistical universe"). The methodology for conducting the research was based on the development of modern scientific study of the particularities of structure of the skin tumors morbidity in the population of the republic; the unit of study was the patient with primary cutaneous tumors. Research methodology was developed on basis of the local authors and foreign publications. In order to achieve the research objectives we have determined as a methodological protocol the application of the linear model for the organization and implementation of the research: finding the problem -> define the key concepts of the thesis -> determining research model -> determining sample -> observational study sheets -> data collection -> analysis and synthesis results -> work out the conclusions -> practical application of research results.

Results: The achieved results offer to clinician exact data that allow: to improve the anti-tumoral therapy and respectively the population health, perspectives of continuously development of diagnosis, treatment and prophylaxis of cutaneous cancers; to lower the cost needed to care of patients which suffer of these diseases by reducing number of cases diagnosed in late severe stages, extension of diagnostic and treatment measures; to improve life conditions of patients suffering from skin cancer, by a performance management of these affections; to reduce population anxiety for cutaneous cancer by correct information regarding disease and the possibility of early diagnosis by dermatoscopy. The thesis results will contribute to enhance the efficacy in early diagnostic of cutaneous tumors and optimization of diagnostic process, and ultimately to increase the treatment efficacy in skin tumors and increase chances and rate of patient recovery.

Conclusions: As a result of complex research conducted by the author on the evolution of the phenomenon epidemiometric parameters morbid skin tumors in Moldova in 2013 we concluded the following: incidence of malignant melanoma has increased by 1.5 times; morbidity skin tumors increased by 40% , malignant melanoma mortality rate - increased by 2.3 times in comparison with 2003. Our study also demonstrated that a large number of people showing skin specific processes address delayed for a specific consult, the average elapsed from onset until presentation to the doctor being about two years, and the underlying cause is unjustified neglect of patients and bad information on the possibility of treatment for early detection of skin tumors.

Key words: Malign melanoma, skin tumors, cutaneous cancer

115. DIAGNOSTIC ISSUES OF PULMONARY LESIONS IN PATIENTS WITH AIDS RELATED KAPOSI SARCOMA

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Introduction: AIDS-related Kaposi sarcoma is the most common presentation of Kaposi sarcoma. Lesions in Kaposi sarcoma may involve the skin, oral mucosa, lymph nodes, and visceral organs. Most patients present with cutaneous disease, although visceral disease may occasionally precede cutaneous manifestations. Pulmonary lesions may be an asymptomatic radiographic finding, as well as associated with respiratory clinical signs. Radiographic findings in patients with Kaposi sarcoma are variable and nonspecific. That could lead to important issues in differential diagnosis with AIDS associated pulmonary abnormalities of other etiologies, in special infections.

Purpose and Objectives: To discuss the differential diagnosis difficulties of pulmonary lesions in AIDS related Kaposi sarcoma, based on two cases from our experience.

Clinical cases: The first case is 36 years old, HIV positive, man with history of prior cured pulmonary tuberculosis (PTB), and actual level of CD4⁺ of 82 cells/ml. At current admission, he presented multiple diffuse papules on skin, consistent with cutaneous Kaposi sarcoma, and respiratory symptoms associated with bilateral confluent nodular opacities on his chest X ray. The sputum microbiological test for bacterial and fungal flora was negative as well as for *Mycobacterium tuberculosis* (MBT). Despite the fact that HRCT images were mostly suggestive for Kaposi sarcoma, the past history of pulmonary TB corroborated with low sensitivity of microbiological tests for MBT in this group of patients, lead to many concerns how to rule out the MBT etiology of the pulmonary abnormalities. The second case describe a similar situation in a 39 years old, HIV positive patient, with a CD4⁺ level of 50 cells/ml, without past history of tuberculosis. Despite the negative results of microbiological tests for MBT, during the current admission, he was diagnosed with PTB mainly based on clinical a radiological signs. At the same time, the skin lesions in this case were mostly absent, being represented only by two tiny small papules on his thorax, ignored during the physical examination. The case had a fatal course. The necropsy didn't confirm the PTB, but pulmonary Sarcoma Kaposi was established.

Conclusion: Pulmonary lesions in patients with AIDS related Kaposi sarcoma could be challenging and requiring a broad differential work up.

Keywords: Kaposi sarcoma, pulmonary lesions in AIDS

116. ALARMING INCREASE IN HIV INFECTION, HEPATITIS AND TUBERCULOSIS IN INJECTING DRUG USERS

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Background: In the last years we observed an alarming increase in the number of newly diagnosed HIV infected intravenous drug users (IDUs) co-infected with hepatitis viruses or with severe bacterial infections. The aim of our study was to assess the prevalence, the demographic and clinical characteristics and the outcome of IDUs diagnosed with HIV, hepatitis and tuberculosis (TB).

Materials and Methods: Prospective study on HIV infected IDUs with HCV and TB admitted at "Victor Babes" Clinical Hospital between January 2009 and December 2013.

Results: Out of 457 HIV infected IDUs, 126 (27.5%) were co-infected with HCV and MTB. The majority were males (84.7%), from urban areas (89.3%), unemployed (81%), with low education level (88%) and a mean age at diagnosis of 30 years (range 16-56). The mean CD4 cell count was 196/mm³ (range 2-1988). Serological markers for HBV were found in 12 patients (9.52%) and for HDV 2 (1.6%). MTB cultures were positive in 61 (48.4%) patients and 2 (1.7%)

had multidrug resistant TB. Disseminated and/or extra-pulmonary TB was diagnosed in 45 patients (35.7%). The mortality rate was 11%, higher in patients with disseminated TB and severe immunosuppression.

We noticed an important increase in IDUs among newly diagnosed HIV cases, from 3.4% in 2009, to 52.7% in 2013 ($p < 0.001$) and in HIV infected IDUs with TB from 0% in 2009, to 30.2% in 2013 ($p < 0.001$).

Conclusions: The incidence of TB in HIV/HCV co-infected IDUs was high with an ascendant trend in the last years. Most of IDUs with HIV/HCV and TB were males, with a low education level and unemployed. The apparently low proportion of patients co-infected with HBV may be due to insufficient testing for other markers of HBV. TB infection was more frequent in patients with severe immunosuppression, especially in IDUs with disseminated and/or extra-pulmonary disease.

In Romania, IDUs are important candidates for acquiring and transmitting HIV infection, viral hepatitis and TB, being difficult to control due to their high risk behaviors. Strengthening of HIV transmission prevention strategies, particularly in identified risk groups, is mandatory.

Keywords: HIV, IDU, coinfection

117. CLINICAL MANIFESTATIONS OF UNBROKEN ANEURYSMS. CLINICAL AND NEUROIMAGING STUDY

Groza Marina

Academic adviser: **Moldovanu Ion**, M.D., Ph.D., Academician, Department of Neurology, State University of Medicine and Pharmacy "Nicolae Testemițanu" Chișinău, Republic of Moldova

Introduction: An intracranial aneurysm is a cerebrovascular disorder in which weakness in the wall of a cerebral artery or vein causes a localized dilation or ballooning of the blood vessel. Cerebral aneurysms are part of the "silent killer" disease, is the main cause of SAH. About 10% of people with SAH die before getting medical assistance, 25% die within the first 24 hours, 40-49% die within 3 months. The peak age of SAH, due to aneurysms, is in the range 35-60 years. In all type of cerebral aneurysmal pathology has tried various methods to exclude intracranial aneurysm, but the big problem is in the identification of these aneurysms before they cause a drama.

Purpose and Objectives: Studying the spectrum of clinical manifestations of unbroken cerebral aneurysms. Assess the correlation between peculiarities of headache and presence of unbroken aneurysm.

Materials and methods: The study was based on analysis of 50 patients with unbroken cerebral aneurysms. The study has two parts: clinical and neuroimaging. For this purpose we investigated all patients and analyzed imaging aneurysms.

Results: Unbroken aneurysms are considered asymptomatic. The aneurism is usually diagnosed accidentally, but in our scientific research have been determined some specific symptoms through clinical evaluation of results. The most characteristic sign is migraine pain present in 82% of patients. Other symptoms are: pain on the top and back of one eye, a pupil dilation, disturbances or double vision, numbness, weakness or paralysis on one side of the face, drooping eyelids. The results of clinical study showed also the factors contributing to the development of brain aneurysms, these are: smoking, hypertension, traumatic brain, congenital resulting from inborn abnormality in artery wall, family history of brain aneurysms and age over 40. The neuroimaging study has determined the configuration, dimensions and location of the aneurysm. The study also determined the specific symptoms depending on every one location.

Conclusion: A headache different from other previous headaches or accompanied by visual changes especially at young people would have suspected an aneurysm. These symptoms may be a warning sign of an impending rupture, as 10% to 43% of patients with SAH report experiencing a "sentinel" headache for two month preceding the rupture.

Keywords: Aneurysm, SAH, "sentinel" headache

118. PRIMARY GASTRIC NON-HODGKIN LYMPHOMA: CLINICAL ASPECTS, DIAGNOSIS, TREATMENT

Guzun Tatiana

Scientific coordinator: **Robu Maria**, M.D., Associate Professor, State University of Medicine and Pharmacy "Nicolae Testemițanu", Chisinau, Moldova

Introduction: NHL (non-Hodgkin lymphomas) are malignant tumors that develop from hematopoietic cells located extramedullary, heterogeneous in terms of morphology and biology. They are the most common malignancies of the hematopoietic system. Of all primary tumors recorded annually, NHL are diagnosed in 5% of males and in 4% of females. Impairment in primary gastric NHL meets quite often. Extranodal location of NHL is recorded in 42% of cases. One of the most eliminates frequent extranodal localization is the gastrointestinal tract (13.3%). Different effect on different compartments eliminates frequent gastrointestinal tract: the stomach eliminates frequent being affected - in 70-75% of cases.

Purpose and Objectives: to study the clinical aspects and treatment results in impaired primary gastric NHL.

Materials and methods: The outpatients records were studied in 84 patients diagnosed with non-Hodgkin lymphoma (NHL) with primary involvement of the stomach, which is registered by the haematologists at the Institute of Oncology in the period 2000 - 2013. Of 84 patients diagnosed with primary gastric NHL, females with 48 and males – 36, with a median age of 57 years.

Results: NHL with primary involvement of the stomach developed frequently in people aged between 51-70 years (50%) and were rarely diagnosed at the age 19-30 years (3.6%). The common location of gastric NHL, was the stomach body (42.8%). In the primary NHL damage of the stomach have been mainly developed aggressive variants (85.7%). Regardless, morphological structure, gastric NHL initially spread in to the lymph abdominal nodes. Extranodal metastases occurred mainly in the liver, spleen, different regions of the tract gastrointestinal. The efficacy of the treatment in gastric NHL depended on the stage of tumor. Gastric resection is an important component in the combined treatment of primary gastric NHL damage.

Conclusions: In primary gastric NHL damage regardless, morphological variant, age and disease stage optimal method of management is combined treatment: Surgical + Radiotherapy + Combined chemotherapy.

Keywords: non-Hodgkin lymphoma, combination therapy

119. ULCERATIVE COLITIS - CLINICAL AND PARACLINICAL FEATURES

Florea Marina

Academic adviser: **Berliba Elina**, MD, Associate professor, Department of Gastroenterology, State Medical and Pharmaceutical University "Nicolae Testemițanu", Republic of Moldova

Introduction: Ulcerative colitis (UC) represents a major problem in modern gastroenterology, mostly due to the incomplete knowledge on its etiology and pathogenesis and a lack of a "Gold Standard" regarding diagnosis and treatment.

Purpose and objectives: To study the signs and symptoms and the main complications, to appreciate the social impact of the disease, to evaluate the level of accuracy of the paraclinical tests in determining the UC phenotype (extension, activity).

Materials and methods: This is a retrospective study, which focused on the clinical aspects of UC in 105 patients hospitalized between 2011 and 2013 in the Gastroenterology Department of the Republican Clinical Hospital. The precision of the inflammatory markers (erythrocyte sedimentation rate - ESR, C reactive protein - CRP) in appreciating the UC activity was studied on a cohort of 44 cases. The level of UC extension was determined in 49 cases, comparing two methods - colonoscopy and irrigography.

Results: UC affects primarily people of childbearing age and labor force (76.2% - less than 40 y.o.), has a long course (average duration - $4,6 \pm 3,9$ years) and a high level of impairment

(37.1% have a certain degree of disability, out of them 79.4% are less than 40 y.o.). The patients are presenting mostly with local symptoms (abdominal pain 85.7%, bloody diarrhea 80%, tenesmus 68.5%). These are associated with general symptoms (fatigue 100%, weight loss 21.5%, high/slight fever 16.2%). The only extraintestinal manifestation observed was the arthralgia (8.5%). The most frequent complication in UC is anemia (27.6%), which significantly correlates with disease activity ($r = 0,59$, $p < 0,01$). CRP has a higher correlation with UC activity, compared with ESR ($r = 0,78$ versus $r = 0,69$, $p < 0,01$). Colonoscopy has a higher accuracy in determining the level of macroscopical lesions, especially in extended forms of UC (the error rate in irrigography - 33.3%).

Conclusion: UC affects equally both men and women, but has a high predominancy in young people, has a long course of the disease and imposes long-term disability. Any case of UC must be phenotyped, i.e. appreciating the extension, activity and longitudinal pattern. CRP proves to be more informative marker in regards to disease activity. In order to determine the macroscopic extent, it is recommended to use colonoscopy rather than irrigography.

Keywords: Ulcerative colitis, phenotype, erythrocyte sedimentation rate, C reactive protein, colonoscopy, irrigography

120. CLINICAL AND PARACLINICAL FEATURES OF RELAPSED CHRONIC URTICARIA ASSOCIATED WITH HELICOBACTER PYLORI INFECTION

Hapun Diana

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Introduction: Initial studies, performed to check the interference between relapsed chronic urticaria (RCU) and positive *Helicobacter pylori* (HP), showed high prevalence of *Helicobacter Pylori* infection in patients with RCU and high rates of remission of urticaria after eradication therapy.

Purpose and Objectives: Evaluation of clinical and paraclinical features of relapsed chronic urticaria associated with *Helicobacter pylori* infection.

Materials and Methods: The retrospective study of 60 patients with RCU hospitalized in the Allergy Department of the Republican Clinical Hospital was performed. FEGDS with biopsy and histological detection of HP infection was obligatory for all patients.

Results: No particularities of eruptive syndrome were found in the study group in comparison with control group. Prevalence of dyspeptic syndrome was equally high in both groups. The presence of the relationship between gastro-duodenal mucosa inflammation and increased titers of anti *H. pylori* IgG was determined. In patients with RCU and HP infection were observed simultaneous inflammatory gastro-duodenal pathology in 100%. The rate of erosive-ulcerous affectations was similar in the comparison groups (13.3% and 20%).

Conclusions: The clinical manifestations are similar in patients with RCU and HP infection and in the control group without HP. In both investigated groups the changes of gastro-duodenal mucosa according to FEGDS data are similar: edema inflammatory injuries and hyperemia prevail mainly on the erosive-ulcerative injuries. Anti-HP IgG in high titer correlates with edema inflammatory injuries and hyperemia of the gastro-duodenal mucosa, unlike erosive-ulcerative injuries, in which the values of anti-HP IgG are not high.

Keywords: Relapsed chronic urticaria, *Helicobacter Pylori*, clinical and paraclinical features

121. THE RISK FACTORS IMPORTANT FOR NON – ICU NOSOCOMIAL PNEUMONIA

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Introduction: Nosocomial pneumonia (NP) is the 2nd most frequent cause of nosocomial infection. About half of the cases of NP occur outside ICU and differ from ventilator-associated

pneumonia in several aspects. The most important risk factors for this NP are: age > 60 years old, important comorbidities (COPD, diabetes mellitus and heart failure), prior antibiotic treatment, the use of nasogastric tube and length of hospitalization > 11 days.

Purpose and Objectives: To analyze the known risk factors important for non-ICU HAP.

Materials and methods: Our study was performed in the medical and surgical wards of the Republican Clinical Hospital and the Institute of Phthisiopneumology "Chiril Draganiuc" and included 22 patients: 13 (59,1%) were from general wards and 9 (40,9%) - from surgical wards.

Results:

| Risk factors | Cases, No. (%) |
|----------------------------------------------|----------------|
| Surgical manipulations | 9 (40,9%) |
| Nasogastric tube | 4 (18,2%) |
| Prior AB therapy | 9 (40,9%) |
| Length of hospitalization | 16 (72,7 %) |
| 1 underlying disease | 7 (31,8 %) |
| 2 and more underlying disease | 14 (63,6 %) |
| Heart failure | 14 (63,6 %) |
| Diabetes mellitus | 7 (31,8 %) |
| Neurological disorder | 3 (13,6 %) |
| Neoplasm | 2 (9,1 %) |
| Renal failure | 4 (18,2 %) |
| Hepatic cirrhosis | 7 (31,8 %) |
| Chronic obstructive pulmonary disease (COPD) | 2 (9,1 %) |
| Age > 60 years old | 16 (72,7 %) |

Conclusion: The most frequent risk factors for non-ICU NP observed in our study were similar to those considered in the literature. Most patients were older than 60 years old, had 2 and more comorbidities, mainly heart failure and diabetes. We also frequently found some extrinsic risk factors that have been described as very important for colonization with resistant microorganisms: prior AB treatment, surgery and prolonged hospitalization. We consider that the small number of patients is a considerable limitation for our study.

Keywords: nosocomial pneumonia, non-ICU nosocomial pneumonia, risk factors

122. HEADACHES IN PEOPLE WITH TMJ DYSFUNCTION

lovu Nicolae

Academic adviser: **Moldovanu Ion**, M.D., Ph.D., Associate Professor State Medical and Pharmaceutical University "Nicolae Testemitanu", Chişinău, Republic of Moldova.

Introduction: TMJ dysfunction is a collective term that meets a wide variety of clinical problems including masticatory muscle problems, TMJ and associated topographic anatomical structures problems. Dysfunctions are only a subset of a larger group of craniofacial pain and dysfunctions, which includes somatic, psychological and neuropathic pain. The complexity and difficulty of the sensitive and motor innervation of TMJ elements and muscles as well as connections and interrelations of various cranial nerves, highlights the importance of the CNS in achieving lower jaw function and at the same time causes difficulties in the differential diagnosis of pain symptoms in the craniofacial area.

Purpose and Objectives: (1) To describe the relation between craniofacial pain and TMJ disorders. (2) The use of new diagnostic methods and technologies in patients with TMJ dysfunction, allowing early detection of pathological changes in stomatognathic system.

Materials and methods: 2 questionnaires: 1-headache questionnaire; 2-TMJ Health Questionnaire (BioRESEARCH Associates, Inc.). 20 patients aged between 18-50 with TMJ dysfunction accusing headache and orofacial pain were examined. Paraclinical diagnostic methods used: JVA- Joint Vibration

Analizis; EMG- Electromyography; Quadra TENS- Transcutaneous Electrical Neural Stimulator; T-Scan - Occlusal analizis system designed to measure and record relative bite forces over time.

Results: According to data with clinical and laboratory investigations mentioned, most patients who presented with headache were diagnosed with TMJ dysfunction (disc displacement with/without reduction, degenerative processes, etc.). TMJ dysfunction prevalent in patients aged 35-50 years, affected the feminine sex. Explanation: estrogen through PNS affects blood flow in the TMJ. This in turn reduces the patient's ability to repair damage caused in the joint capsule. Lack of estrogen affects permeability of magnesium in the cell wall, while magnesium is a mineral involved in the production of synovial fluid. The decrease of it means low lubrication of the joint and that low levels of estrogen decreases the pain threshold of the patient and makes them more sensitive to discomfort. The usefulness of these investigations helped early diagnosis of TMJ diseases with further development of treatment plan properly and efficiently. In 15 patients following treatment performed was observed improvement of dolor symptoms in orofacial region and decrease headache. The other 5 patients, through interdisciplinary collaboration (dentist, neurologist, psychiatrist, rheumatologist) were subjected to further investigation to determine the etiopathogenetic polymorphism of headache.

Conclusions: In patients who presented in the dental office with headache and oro-facial pain, most are of joint pain, a smaller percentage representing another cause pain. TMJ disorders are encountered more often in women being criminalized hormonal and psycho-emotional factors. Also, low quality dental restorations and incorrect orthodontic procedures can complicate and even initiate TMJ dysfunctions. The investigations carried out have helped diagnose the TMJ disease itself with a plan for effective treatment and relief of dolore symptoms.

Keywords: TMJ, CNS, PNS, Stomatognathic System

123. CLINICAL FORMS OF THE PSYCHOORGANIC SYNDROME

Jechiu Tatiana

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Introduction: Organic mental disorders are among the most common psychiatric disorders and ranks 4th in the structure of global prevalence. Today about 430 mln people suffer from 1 or more mental disorders. 13,4% of these suffer from psychoorganic syndrome. In the US 75mln cases are registered annually. In RM during '05-08 there was an increase in the incidence of mental illness by 9,5%. In 2010 there were 98564 patients with mental illness. More than 60% of patients with organic mental disorders develop psychoorganic syndrome. In separate studies the incidence of psychoorganic syndrome was studied, ranging from 15,2% to 32%.

Purpose and objectives: To study the clinical variants of the psychoorganic syndrome, to estimate its evolution and methods of treatment.

Material and methods: The basic methods used were: clinical and statistical methods. The clinical method included: history taking, observation and description of clinical manifestations. To assess the memory process the method of memorizing 10 words was used. Miller's rule was applied. To assess thinking disorders the following were used: association between objects and their significance, explaining metaphors and proverbs.

Results: We studied the incidence of etiological factors. We correlated the syndrome form with: degree of education, relationships with close people, ability to work etc. We highlighted the most frequent clinical manifestations.

Conclusions: The psychoorganic syndrome is aver frequent disorder, which limits the ability to work, affects the relationships with family and friends and the general condition of the patient. Patients should be diagnosed carefully based on clinical findings in order to choose the most adequate treatment and improve the patients' quality of life.

Key words: Psychoorganic syndrome, thinking disorders, memory process, attention decrease, apathetic/ asthenic/ euphoric/ explosive variants

124. CYTOMEGALOVIRUS INFECTION AND INFLAMMATORY BOWEL DISEASE

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Introduction: Inflammatory bowel disease (IBD) is a general name of two entities: Crohn's disease (CD) and ulcerative colitis (UC) which represent chronic non-specific inflammation of gastrointestinal tract. The etiology of IBD is not clear and Cytomegalovirus infection is often associated with IBD. The pathogenetic link between IBD and CMV infection was supposed and began to be studied in the last decades.

Purpose and objectives: The aim of the study was to evaluate critically literature data on the relationship between CMV and IBD.

Materials and methods: Internet search was conducted in Medline (from 1966 to 2013) and PubMed (from 1980 to 2013) database using words “cytomegalovirus”, “inflammatory bowel disease”, “ulcerative colitis”, “Crohn's disease”.

Results: 419 articles were found. Early studies indicated that CMV infection can lead to subsequent development of IBD. But in the more recent studies was demonstrated that CMV colitis occurred primarily in patients with pre-existing IBD. There have also been reports of colitis patients with evidence of active CMV infection who improved with steroids and did not require antiviral treatment, as well as patients with active colonic CMV infection without active colitis. In these cases CMV seems to behave like an innocent bystander.

CMV has the propensity to infect rapidly growing tissue, especially endothelial cells in granulation tissue. Some studies suggested that CMV represents an opportunistic infection in severely inflamed mucosa rather than a primary pathogen.

The most widely held theory is that CMV infects areas of active IBD and causes further tissue injury aggravating the severity of the underlying IBD. In the majority of case-reports patients with severe attacks of IBD and CMV infection had significant morbidity (toxic megacolon 15%, colectomy up to 62%) and mortality (up to 44%). Antiviral treatment prevented colectomy in some but not all of the patients. In more recent series the morbidity of CMV colitis in UC were 30% and the rate of surgery 40%. CMV disease seems to be less frequent in patients with CD compared to patients with UC. The prevalence of CMV infection in steroid-refractory IBD patients, in 2 studies, was 36% and 33%, respectively.

Conclusion: The role of CMV infection in patients with IBD has not yet been clearly defined. In the majority of published studies CMV is considered as pathogenetic factor, which complicates the IBD course causing the resistance, while in others CMV does not seem to alter the natural course of the underlying IBD.

Keywords: Cytomegalovirus, inflammatory bowel disease, ulcerative colitis, Crohn's disease

125. NON-SCARRING ALOPECIA - CLININICO-DIAGNOSTIC AND TREATMENT SYNTHESIS

Leontii Dmitrii

Academic adviser: Mircea Betiu, M.D., Associate professor, Department of Dermatovenereology, State Medical and Pharmaceutical University “Nicolae Testemitanu”, Chisinau, Republic of Moldova

Introduction: Hair loss (alopecia) is a very common patient problem and often a significant source of patient distress. An accurate diagnosis can frequently be difficult. A rational, organized approach is crucial, as therapy is dictated by the appropriate diagnosis. The first task of the physician is to address the patients' concerns fully, exploring the impact of alopecia on psychosocial well-being.

Androgenetic alopecia (AGA) is by far the most common cause of hair loss. It affects approximately 50% of men by the age of 50 and 20% to 53% of women by the age of 50. Although it is a medically benign condition, it can have a significant psycho-social impact for patients.

Alopecia areata is a chronic inflammatory disease that affects the hair follicle and sometimes the nail. About 20% of people with alopecia areata have a family history of the disease indicating a genetic predisposition. The prognosis is less favorable when onset occurs during childhood and in ophiasis. The risk of developing alopecia areata in life is 2%.

Telogen effluvium (ET) is probably the second most common form of hair loss. The number of secondary causes that can cause ET is growing.

The aim of the study: Evaluation of the anamnesis, clinical course and treatment of non-scarring alopecia and confrontation data reviewed in literature with my study.

Materials and methods: For observations were subjected 44 patients, 10 with alopecia areata, 14 with androgenetic alopecia and 20 with telogen effluvium.

Prospective analysis: Clinical examination was performed selectively in outpatient. Patients were subjected to the following tests:

Hair loss history questionnaire

What is the duration and pattern of the hair loss?
Is the hair coming out by the roots, or is it breaking?
Increased shedding or increasing thinning?
Age of onset
Drugs
Menses, pregnancy, menopause
Present and past health
Thyroid function screening questions
Family history
Hair care, hair cosmetics
Diet

1. **A contrast paper test**

2. **Pull test:** To determine the ongoing activity of hair loss.

3. **Trichogram/pluck test:** The trichogram/ pluck test is another method of assessing hair loss

4. **Light microscopic examination of hairs**

Results: At the end of the observation period was noticed the characteristic differential features of each disorder.

| | <i>Androgenetic alopecia</i> | <i>Telogen effluvium</i> | <i>Alopecia areata</i> |
|------------------------|-----------------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------|
| Hair loss distribution | Focal balding pattern: Norwood-Hamilton (men) Ludwig (women) | Generalized | Usually patchy, but can be generalized |
| Course | Gradual onset with progression | Onset abrupt/trigger factor | Onset abrupt; often waxes and wanes with relapses |
| Appearance | Thinning with or without bare Patches. Bare patches are gradual, not abrupt | Thinning with no bare patches | Thinning with abrupt bare patches; exclamation mark hairs |
| Shedding | Minimal | Prominent | Prominent |
| Age onset | Onset at puberty or older | Onset at any age, but usually not childhood | Onset at any age; majority have their first patch before the age of 20 |
| Pull test | Usually negative | Positive; telogen hairs | Positive; dystrophic anagen and telogen hairs |

Conclusions: The majority of common hair disorders can be readily diagnosed in the physician's office through the recognition of the characteristic differential features of each disorder. The first task of the physician is to acknowledge the patient's concerns and have an empathetic approach to the problem of hair loss. The diagnosis depends upon a combination of findings obtained from meticulous history, physical examination and any necessary investigations. An organized diagnostic and management strategy will help both to identify the cause of alopecia and to direct therapy.

126. ALPHA-1-ANTITRYPSIN DEFICIENCY**Nazaria Mihail, Condratchi Diana**

Academic adviser: **Rusu Doina**, Associate Professor, Ph.D., Chair of Pneumology and Allergology, Department of Internal Medicine, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova

Introduction: Alpha-1-antitrypsin deficiency (A1AD) is a hereditary disorder, caused by insufficiency or lack of hepatic enzyme alpha-1-antitrypsin, which blocks neutrophil elastase. A1AD could affect any organs, but mostly the respiratory system is involved. A1AD pulmonary manifestations are panacinar emphysema and COPD. Usually emphysema appears at the age of 30 – 40 years old, in smokers A1AD subjects, but also can occurred at 50-60 years old in A1AD patients how have never smoked.

Clinical Case: 41 years old man, current smoker (smoker index - 30 packs/year), was admitted for dyspnea at rest, cough with mucopurulent sputum, 38⁰C fever, loss of appetite and asthenia. At the same time he mentioned that he has experienced a progressive dyspnea during the last four years. Physical exam revealed: low body weight (BMI 18.5), tachycardia (HR-130 beats/min), tachypnea (RR-26/min) and SaO₂-91% (FiO₂-21%). Signs of lung hyperinflation as well assigns of pulmonary consolidation were found. Laboratory data highlighted leukocytosis up to 16x10⁹/l and increased ESR 52 mm/hour. On ECG - signs of pulmonary cord were attested. The chest X ray revealed bilateral opacities in S9-S10, and radiographic signs of pulmonary hyperinflation. Pulmonary function tests shown obstructive abnormalities (FVC-38%, VEMS-20%, VEMS/FVC -56%) with hyperinflation (RV-188%) and a decreased gas transfer factor (DLCO-27%). Chest CT scan revealed diffuse panlobular emphysema and apical areas of centrilobular emphysema, thickening of the bronchial walls, and basal areas of pulmonary consolidation in both lungs. The serum level of alpha-1-antitrypsin was 0.27 g/l (normal range 0.9 to 2 g/l).

Results: In 2003, ERS/ATS has published the guidelines on the diagnosis and management of the A1AD. The groups of patients in whom A1AD testing is recommended are young adults with persistent bronchial obstruction syndrome, emphysema, COPD, asthma and asymptomatic individuals with persistent bronchial obstruction or those with such risk factors as smoking or occupational exposure.

Conclusion: A1AD is an underdiagnosed disease in patients with chronic obstructive pulmonary disease. The gold standard for A1AD diagnosis is the genetic test (determining the pathogenic version of the gene encoding alpha-1-antitrypsin - SERPINA1), but for screening purpose, methods of quantitative assessment of serum levels of alpha-1-antitrypsin may be useful.

Keywords: Alpha-1-antitrypsin deficiency, chronic obstructive pulmonary disease, screening

127. SWEATING DISORDERS IN PATIENTS WITH CHRONIC MIGRAINE AND CHRONIC LOW BACK PAIN**Nicolaev Victoria**

Academic adviser: **Moldovanu Ion**, Ph. D., M.D., Professor, State University of Medicine and Pharmacy "Nicolae Testemitanu", Chişinău, Republic of Moldova

Introduction: Sweating is a healthy natural physiological phenomenon, with an essential role in thermoregulation and detoxification processes of the body. But there exist such phenomena as sweating disorders wich include: hypohidrosis, anhidrosis and hyperhidrosis.

Purpose and objectives: The study of sweating disorders in patients with chronic migraine and chronic low back pain. (1) Evaluation of perspiration and sweating disorders in these patients. (2) Determination of hyperhidrosis action on quality of life. (3) Identification of anxiety and depression in chronic pain patients with hyperhidrosis. (4) Comparing sweating in higher humidity region for patients with chronic migraine, chronic low back pain and control group.

Materials and methods: The study was conducted on a total of 40 patients aged between 20-65 years, of which 20 patients (women) with chronic migraine (group I) and 20 patients (10 men and 10 women) with chronic low back pain (group II) and 10 healthy subjects aged between 25-58

years (group III). The study consisted of two parts, the first part included patients completing the questionnaires, based on their own subjective opinions. In the second study was conducted objectively, sweat gland function was examined by measuring skin moisture with a special device by "ARAM Huvis" in the following regions: center of the palm, foot, frontal region, left temple and right axillary and popliteal fossa, sternum, abdomen, lumbar and coccygeal regions.

Results: Measuring the skin humidity was observed that these patients have a higher skin humidity than healthy group in all measured regions. In patients with chronic migraine the degree of skin moisture is higher in the frontal region and foot, while those with chronic low back pain have higher skin humidity in the axillary and popliteal fossa and lumbar region. Presented differences are statistically proven to $P < 0.05$. Studying also the questionnaires Beck of depression and Spilberger of anxiety were obtained the following results: the value of reactive anxiety in-group I was 29.95 ± 1.42 in-group II was 22.40 ± 1.16 , being statistically significantly higher in the group with chronic migraine ($P = 0.002$ **). In group III reactive anxiety value was 1.56 ± 1.18 , which differs from group I and II, demonstrated statistically (between group III and II, $P = 0.000$ ***, and between group III and I, $P = 0.001$ ** *). Anxiety personality also presented significant statistical differences in group I 34.25 ± 2.2 compared with group II ($P = 0.000$ ***) and also between Group I and III, group III value was 21.30 ± 2.19 ($P = 0.000$ ***). Between group I and II statistical difference there is not as $P > 0.05$. Studying the questionnaire Beck we assessed the level of depression and found that there are significant statistical differences here between groups I-III ($P = 0.000$ ***) and II-III ($P = 0.000$ ***), the results were 9.65 ± 0.72 versus group I 8.95 ± 0.60 versus group II 0.62 versus group III 4.60 . Between group I and II statistical difference there is not as $P > 0.05$.

Conclusions: Our study confirmed certainly that patients with chronic migraine and chronic low back pain manifest a higher degree of skin moisture than healthy people group, there existing significant statistical differences. Depression and anxiety scales analysis noted that patients with migraine and low back pain are more anxious and the depressive syndrome is more pronounced compared to the control group.

Keywords: Hyperhidrosis, chronic migraine, chronic low back pain

128. HEALTHY SLEEP FIGHT AGAINST OBESITY

Peltec Ines

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Introduction: Sleep is a basic need of the body. In Europe the duration of sleep for adult person (18-55 years) is 7 hours, but more than third of adults sleep less than 6 hours per night. Several studies have shown an epidemiological association between short sleep duration and high body mass index (BMI) associated with obesity. In case when the sleep time is less than 5 hours at night, the risk of obesity increases by 60%. This impact is much greater than that of food intake or lack of physical activity.

Purpose and objectives: We evaluated the correlation between the sleep duration and body mass index, depended of the sex and age.

Materials and methods: Survey was attended by 80 people, aged 15-18 years. Volunteers were selected from two high schools: "Gheorghe Asachi" and "Spiru Haret" Chișinău, Moldova. The questionnaire issued to participants consisted of several parts: name, age, sex, anthropometric data (the waist circumference, height, BMI, sleep time (in hour), the information about food (number of meals) and health problems, information about the parents of participants (body weight, height, BMI, age). In dependence of the duration of sleeping participants were divided into two groups: group A with sleep duration ≤ 8 hours and group B with sleep duration > 9 hours. Statistical analysis was performed using standard Excel functions. To characterize obesity, body mass index (BMI) which is calculated by dividing weight (in kg) by height (in meters) squared was used.

Results: Adolescents included in the study have had a mean age of 16.38 ± 0.5 years, 33 (41%) boys and 47 (58%) girls. Group A have included 43 (53%) teenagers and group B 19 - (23%) participants. In group A and B, the average age of boys and girls has been comparable. The average sleep duration has

been 7.25 ± 0.78 hours for group A and 10.31 ± 0.99 hours for group B. BMI among boys who sleep less than 8 hours has been greater than in case of the optimal sleep duration more than 9 hours (22.63 ± 3.59 vs. 20.41 ± 1.29 ; $p = 0.02$). We didn't find this difference in case of girls from the studied groups.

Conclusion: The anthropometric assessment of adolescents from Chisinau, allowed us to evaluate the correlation between duration of sleeping and body mass index. BMI was higher among boys with sleep duration less than 8 hours.

Key words: Sleeping, body mass index, short sleep duration, obesity

129. RARE CASE OF DRUG-INDUCED ALLERGY REACTION

Redei Angela, Țăruș Cristina

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Introduction: Adverse drug reactions (ADRs) are broadly divided into predictable (related to pharmacological actions of the drug in otherwise normal individuals) and unpredictable reactions (related to individual's immunological response and, on occasion, to genetic differences in susceptible patients). Drug allergy is a type of unpredictable reaction. ADRs should be differentiated from adverse drug events (ADEs). ADEs extend beyond ADRs to include harm related to medication errors and drug/food interactions. While knowledge of ADEs is important in efforts to improve patient safety, ADRs are the primary focus of regulatory agencies and post-marketing surveillance.

Clinical case: We present a 73-year-old woman who was consulted in the Emergency Room and admitted in the Internal Medicine – Geriatrics Department because of a sudden syncope at home, associated with dyspnea at rest and high rhythm palpitations. Three months ago she was diagnosed with atrial fibrillation, but she stopped the treatment a week before coming to ER. The paraclinical tests showed no heart anomalies so it was decided to initiate the therapy with Propafenone. After 8 days the Propafenone is changed with Amiodarone because the EKG showed left bundle branch block (LBBB) and the laboratory analysis presented high values of cardiac enzymes, but the patient had a worsening general condition, associating dyspnea with nervousness, coughing and increased heart rate ($SO_2=80-82\%$, Pulse=130bpm), so she received oxygen therapy and a beta-blocker. On the next day she presented an allergic rash spreaded all over her body and so she received Hydrocortisone hemisuccinate, but her allergy persisted and even spreaded wider. We realized that she developed this abnormal reaction to Amiodarone, Metoprolol and later to all the administrated drugs, even on antiallergic one. Afterwards she reacted pretty well on antihistaminic medication, vitamin C and calcium. The paradox was that in absence of any medication the heart rate remained convenient.

Results: A study of 141 patients with suspected drug eruptions, including histological assessment, found that 24% were in fact reactive rashes or had other causes, suggesting that drug eruptions were overdiagnosed on clinical grounds alone. Of the confirmed drug-related eruptions, 39.8% were caused by antibiotics, 21.2% by anti-inflammatories, 7.6% by contrast media and 31.4% by others (oral antidiabetics, antimycotics, antipsychotics, anti-epileptics and others).

Conclusion: All drugs can cause an allergic reaction and despite the fact that allergic reaction to Amiodarone is very rare (under 1%), it still can occurs and it has to be considered when one presents immunological reaction to the treatment.

Keywords: drug allergy, adverse drug reaction

130. CUTANEOUS TUBERCULOSIS: DIAGNOSTIC CHALLENGES

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Introduction: Despite of a high incidence of pulmonary tuberculosis (114,3/100.000) the rate of extrapulmonary TB rests very low (1,3%). Cutaneous TB is often misdiagnosed due to confused clinical picture and none relevant bacteriological tools for detection of *M. tuberculosis*.

Purpose and Objectives: To find out the diagnostic challenges of cutaneous tuberculosis.

Material and methods: Two patients, a 40 years old female patient and a 6 years old boy with Cutaneous TB were studied.

Results: The 40 years old patient with alopecia areata since the age of 9, presented nodular hypodermatitis on the posterior aspect of both legs for 17 years without any treatment, complaining it steadily progression in cold seasons. It was performed an esthetic intervention on the nasal pyramid after a facial traumatism. The post-intervention lesion failed to heal extended to brownish-red plaque covered by a scale with red borders, on both cheeks, with more evident extension in cold seasons. There were taken 2 biopsies from the face and left leg showing tubercle granulomas with wide areas of caseation, foreign body and giant cells Langerhans. No acid-fast bacilli were found on Ziehl-Neelson staining, classic culture on solid medium was negative for M.Tuberculosis (MTB), but PCR detected specific fragment for MTB DNA from facial lesions. The patient had TB contact in childhood, multiple post-primary quiescent lesions in both hills and pulmonary parenchymas on chest XRay and a peripheral adenopathy. Diagnosis of Lupus vulgaris for facial lesions and indurated Erythema Basin for nodular hypodermatitis was established. The antiTB treatment for new case was started with no evident clinical improvement. The second clinical case presents a 6 years old boy with an unestablished immune disorder with reduced immunity and sensitivity to MTB antigenes proved by a hyperergic Mantoux reaction. He complains a large deep brownish plaque, on the nose and both cheeks with steadily progression and contraction of nasal fossaes, with polycyclic outlines and smooth surface, alopecia areata, dorsal kyphoscoliosis, drummer fingers and abdominal distention. It was revealed 2 groups of multiple papules and macules with squamous surface on the left part of hemithorax and abdomen. From the anamnesis it was revealed a surgical intervention for adenopathy in the left axilla at the 4 months age. The cutaneous byopsia revealed tubercle granulomas with wide areas of caseation and giant Langerhans cells. No one specimen at Ziehl-Neelson staining, solid and liquid cultures and PCR was positive. Lupus vulgaris was established for facial lesion and papula necrotic tuberculides for abdominal lesions, as focal post-BCG complication. The antiTB treatment according DOTS standard was started with local application with Rifampicin ointment that contributes to a slow regression.

Conclusion: Lupus vulgaris is chronic, mutilating extrapulmonary TB, appearing in moderate immunity and previously sensitive individual, often very late detected due to absence of a proper diagnosis and without specific appearance. Pathogenetically is a feature of a quiescent post-primary sequelae showed in first case, or follows after BCG inoculation, as in child case.

Innovative value: This study increases awareness of the re-emergence of cutaneous tuberculosis imposing the using of the proper diagnosis tools for a early diagnosis and case management.

Keywords: Tuberculosis, diagnosis, management

131. PRURITUS- ESSENTIAL SYMPTOM IN DERMATOLOGY

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Introduction: Pruritus is a symptom frequently reported in dermatological consultations. It is a subjective skin reaction leading to a need, which varies in intensity, to scratch oneself. This may be localized or generalized to the whole of the body, may be physiological and temporary, and may vary in its severity. It is extremely irritating and may reveal a pathological condition. Diagnosing pruritus is still a constant problem because the frequently use of self-medication and harmful cultural practices which may delay the diagnosis.

Purpose and Objectives: Studying the aspects of etiology, clinical evolution of pruritus in a specialized environment.

Materials and methods: The study was conducted on a sample of 1337 patients whose main accuse was itching, hospitalized in IMSP Hospital Dermatology and Communicable Diseases during January 2013 – December 2013.

Results: Over the study period, 1337 patients (whose the main accuse was pruritus), were drafted into the study of a total of 2441 (who were hospitalized in 2013). This concerned 634 women (47%) and 704 men (53%), which was a gender ratio M:F=1,12:1. The age of patients varied from 18 to 87 years, the majority of patients with itching refers to the age group 46-62 years (39,41%), residing in a urban environment 58,1% (777 cases). Was observed the predominance of pruritus in summer 29,84% of cases, this is probably linked to the summer temperature, UV-rases and transpiration. In this study was revealed the prevalence of moderate pruritus in 77% of patients, which in dependence of period of appearance was temporary 38%, with the most severe cases in summer 33,49%. The majority of patients had generalized skin process 60,73%, the most affected region was the scalp-32,38%, this was probably linked to the high-frequency of Acnes Vulgaris, Psoriasis, Rosacea, Allergic contact dermatitis. Pruritus is related in 43,83% cases of Skin diseases of unknown etiology, allergic disorders (Dermatitis, Urticaria, Prurigo, Eczema) represented 33,96%. The most severe cases with pruritus were reported at the patients with allergic disorders.

Conclusion: Pruritus is the most common symptom reported in dermatological consultations, approximately every second patient accuses itching. It reveals a pathological condition, and may affect unfavorably the quality of life. It is very important to identify its etiology, and to begin an adequate treatment that will improve the quality of patient's life.

Keywords: Pruritus, itching, skin, prevalence, scratch

132. CLINICAL AND EVOLUTION PARTICULARITIES OF PANDEMIC INFLUENZA A(H1N1) IN PREGNANT WOMEN

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Introduction: Influenza A (H1N1) it is acute infectious disease caused by a new type of virus emerged after the combination of three viruses: human, swine and avian global pandemic. Changes in the immune, cardiac and respiratory systems are likely reasons that pregnant women are at increased risk for severe illness with influenza. During previous pandemics, mortality rates among pregnant women appeared elevated, and data from seasonal influenza demonstrate that pregnant women are at higher risk for the life of the pregnant woman and fetus. H1N1 infection in pregnancy with increase in mortality rate (25% versus 8% in nonpregnant women).

Purpose and objectives: Evaluation of the clinical, epidemiological and evolutionary particularities of influenza A (H1N1) in pregnant women in different trimesters of pregnancy.

Materials and methods: I realized a retrospective study on the 42 pregnant women hospitalized in the IMSP Municipal Maternity Nr.2, Chişinău, during 2009-2011. The average age of pregnant women with influenza A (H1N1) included in the study was about 23±4,1 year, the average of gestation period 20,7±6,2 weeks. Pregnant women were investigated clinically and laboratory (PCR).

Results: Influenza A (H1N1) has similar clinical symptoms to seasonal flu with the symptoms: asthenia (95,2%), fever (90,4%), headache (83,3%), myalgia (21,4%), arthralgia (11,9%), dry cough (78,5%), moist cough (21,4%), retrosternal pain (7,1%), rinorea (76,2%). Dyspnea symptom- in 3 cases 7,1%. Complications in pandemic influenza in pregnancy: early miscarriage 5 (11,9%), late miscarriage 2 (4,7%), imminence of premature labor 8 (19,1%). Pulmonary complications: laryngotracheitis 4 (9,5%), bronchitis, 13 (30,9%), bronchopneumonia - 5 (11,9%), pneumonia, two (4,8%) pregnant women and others complications: exacerbation of chronic pyelonephritis - 7 pregnant women (16,7%).

Conclusions: Respiratory pathology involves a two fold risk for mother and child lives. Results of studies demonstrated the impact of the virus A (H1N1) on pregnancy outcome having miscarriage effect in early/ late terms of pregnancy and imminence of premature labor in the 2 and 3 trimester.

Keywords: Influenza A (H1N1), complications PCR

133. GENDER DIFFERENCES IN ISCHEMIC STROKE**Ududovici Nelea***Academic adviser: Manole Elena, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chişinău, Republic of Moldova*

Introduction: Stroke is a major problem worldwide. Nowadays, ischemic stroke is the first cause of long-term disability in the world and the second leading cause of death worldwide. The World Health Organization estimated that 5.7 million people die annually of an ischemic stroke. Sex differences in ischemic stroke are increasingly being recognized. Women have not only a higher risk for making a stroke but also a higher rate of mortality, disability, depression and post-stroke dementia, as compared to men. Differences between woman and man in ischemic stroke are observed across the epidemiologic studies, pathophysiology, treatments and outcomes. Epidemiologic studies reveal a clear age-by-sex interaction in stroke prevalence, incidence and mortality. Women's (45-54years) premenopause prevalence of stroke is smaller in women than in men of the same age but the stroke increased twice among women in the postmenopausal period (75-85 years) compared to men of the same age. These postmenopausal phenomenons, along with life expectancy are reasons for women to have a stroke at an older age onset and suffer more severe strokes. Thus, a primary focus of stroke prevention has been based on steroid hormone-dependent mechanisms. Sex hormones affect different (patho) physiologic functions of the cerebral circulation. In addition, strokes appear to be more adverse in women than in men, based upon older age, longer prehospital delays and eventually differences in treatment.

Purpose and Objective: To emphasize evolutionary peculiarities, risk factors and etiology of cerebral vascular accidents according to gender.

Materials and Methods: This study included 169 patient with ischemic stroke registered during 2013 (January to September) of which 79 (46.7%) men and 90 (53.3%) women.

Results: The differences between men and women showed the incidence in women was lower than in men aged 61-70 years and younger, but had higher incidence in women aged 71 years and older ($P < 0.05$). Common vascular risk factors like obesity (46,83% vs 68%, $P < 0.001$), small vessel disease (8.86% vs 20%, $P < 0.05$) are more frequent in women but heart disease (60.75% vs 56.66%, $P > 0.05$), hypertensive angiopathy (73.4% vs 38%, $P < 0.001$), headaches (20.25% vs 10.2%, $P > 0.05$), history of stroke (34.17% vs 26.6%, $P > 0.05$) are more frequent in men. Atherothrombotic subtype of ischemic stroke was more common in male (32% male vs 11% female, $P < 0.05$), while cardioembolic in women (26.6% male vs 32.2% female, $P > 0.05$). NIHSS score estimates the severity of the stroke and we did not observe any differences between women and men (69% male vs 69.62% female). The Rankin Scale was used to evaluate the outcome of handicap and it was significantly higher in women than in men (22.22 ± 4.38 vs. 6.32 ± 2.73 , $P < 0.01$). Stenosis (50% -70%) at the bifurcation of the common carotid artery occurs frequent in women than in men (2.53 ± 1.76 vs. 13.33 ± 3.58 , $P < 0.01$). Frequently the ischemic stroke is higher in women in the carotid area (70% vs 77,3%, $P > 0.05$) but in men in the vertebrobasilar area (22% vs 13.63%, $P > 0.05$.)

Conclusion: We found that ischemic stroke was lower in women than in men aged 61-71 years and higher in female who are older than 70 years. Our study did not find significant gender-specific differences in stroke severity but find that female gender was a significant predictor of disability and handicap.

Keywords: Ischemic stroke, score NIHSS, Rankin scale

134. BIG UTERINE MYOMA AT AN EARLY AGE – CLINICAL CASE**Virlan Mariana, Craciun Alina***Scientific Adviser: Rotaru Tudor, M.D., Associate Professor, Department of Oncology, Hematology and Radiotherapy, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chisinau, Republic of Moldova*

Introduction: Uterine myoma is a benign mesenchymal tumor from smooth muscle tissue.

Uterine myoma is one of the most common female tumors. Statistics show that uterine myoma is found in 20% of the female population.

Purpose and objectives: We report an additionally case of uterine myoma.

Materials and Methods: A 20 years old female patient was admitted with an giant abdominal tumor which raised in two months with an uterine provenience. This tumor was confirmed by clinical examination, USG and CT-scan.

Result: During the surgery, was suspected a malignant uterine tumor. This patient support a total hysterectomy surgery, but histological examination and immunohistochemical analysis proved the benign uterine tumor. Three months after initial diagnosis and surgery the patient is asymptomatic and was scheduled for very close follow up.

Conclusion: This case presents an interes with: an early age of the patient, the rapid evolution of tumor process, difficulties in clinical and histological diagnosis, and in the origin and nature of the tumor (benign or malignant).

Keywords: Uterine myoma, early age

135. HEMOGLOBIN AS NOVEL CARDIOVASCULAR RISK FACTORS IN FATTY LIVER

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Introduction: As it affects almost every third individual in the population in the Western world, non-alcoholic fatty liver disease (NAFLD) represents the most common cause of chronic liver disease and the most common cause of liver transplantation. Many metabolic, hemodynamic, hormonal, prothrombotic and pro-inflammatory cardiovascular disease (CVD) risk factors exist. Prior research suggests that hemorheological determinants, including whole blood viscosity, fibrinogen, and hematocrit may be risk factors for ischemic or coronary heart disease. However, the detail relationship between serum hemoglobin concentrations and CVD has not been clearly clarified.

Purpose and objectives: We analyzed the potential mechanisms of the association between increased hemoglobin and CVD risk in NAFLD.

Material and methods: The materials are collected by searching keywords (nonalcoholic fatty liver disease, cardio vascular diseases risk factors and hemoglobin) from medical database, such as: Pubmed, Medline, Embase, Cochrane Register.

Results: The hemoglobin is positively correlated with well-known cardiovascular risk factors such as BMI, blood pressure, fasting glucose, total cholesterol, and smoking status after adjusting for age. The exact mechanisms whereby increased hemoglobin in NAFLD might lead to a higher risk of CVD are unknown, but the main hypothesis is that increased hemoglobin concentrations lead to increased blood viscosity, thereby raising peripheral resistance and reducing blood flow and perfusion to the heart. In turn, a reduction of perfusion has been suggested to accelerate ischemic heart disease. High level of accumulated iron itself can increase cardiovascular risk by oxidative stress and lipid peroxidation. Hemoglobin concentration could affect the cardiovascular system through oxygen supply and blood viscosity. In addition, elevated hematocrit level may activate platelets by releasing adenosine diphosphate. It is essential to investigate this association in the future.

Conclusions: The emphasis was on the potential role of increased hemoglobin as a marker of more-severe liver damage and fibrosis in the spectrum of NAFLD. Abnormal rheological characteristics of blood due to increased hemoglobin might represent an additional mechanism that contributes to the development of CVD; these could lead to the development of novel therapeutic approach in CVD prevention.

Keywords: Nonalcoholic fatty liver disease, cardio vascular diseases risk factors, hemoglobin

136. CHRONIC HEADACHES ASOCIATED WITH AUTONOMIC, INTEROCEPTIVE DISORDERS. CLINICAL PSYCHOLOGICAL TRIAL.

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Introduction: Interoception describes the perception of symptoms and sensations that originate within the body. Interoceptive perception of internal change functions as the first stage in the process of symptom detection. Interoceptive accuracy is also relevant for specific clinical conditions, there is evidence that interoceptive accuracy is higher for sufferers of anxiety disorders and depression the same for migraine. Migraine is a chronic neurological disorder characterized by recurrent moderate to severe headaches often in association with a number of autonomic nervous system symptoms.

Purpose and Objectives: Our goal was to show the impact of the chronic migraine on autonomic dysfunction and perception disorders – interoception and exteroception, to get correlation with affective state (anxiety and depression) and compare perceptive disorders in patients with chronic migraine and diabetes mellitus.

Materials and methods: In our study we examined 70 women: 20 with chronic migraine, 10 healthy women and 40 with diabetes mellitus. For investigation we used the following questionnaires: 1) Questionnaire for chronic headaches in patients with chronic migraine; 2) PVM2 to determine neurovegetative disorders; 3) An additional scale that represents data extracted from PVM2 for perceptive processes: interoception and exteroception; 4) BODY PERCEPTION QUESTIONNAIRE, by Stephen W. Porges, shortened to 50 answers; and 5) to determine anxiety and depression we used Hospital Anxiety and Depression Scale – HADS .

Results: In our study patients with migraine were more symptomatic in comparison with other and symptoms were more expressive, sometimes due to pain. There was a great statistic significans ($p < 0,005^{***}$) on scales: cardiovascular disfunction and interoception. Patients with migraine were also more depressive and has the highest level of anxiety ($p < 0.05^*$). (Martin et al, 1967) consider that migraine may mask depression and anxiety, or other emotional disorders, led to the idea that there are a consequence of the migraine more that a trigger factor.

Conclusion: In our study we found that chronic migraine has a great impact on autonomic nervous system. It decreases the sensitivity threshold and so increase both the interoceptive and exteroceptive processes. The values are higher even then in patients with diabetes mellitus.

Keywords: Migraine, autonomic disorders, interoception, anxiety, depression

137. SYSTEMIC LUPUS ERITEMATOSUS PULMONARY AFECTION

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Introduction: According to statistics the Systemic Lupus Erythematosus is the most frequent disease of connective tissue, it is a systemic autoimmune disease of unknown etiology that affects one or more organs, characterized by an evolution with successive bouts with various clinical symptoms and laboratory manifestations ,with hypersecretion of autoantibodies. It is a condition of current and particular interest from several points: the high incidence of disease in the medical practice, the severity of clinical forms of SLE, extremely complex and various clinical aspects, which evolves from severe to subtle and atypical forms, whose diagnosis can not be explained only by means of immunobiological explorations.

Objectives of the work: Elucidation of the exogenous and endogenous risk factors in the onset of pleural and pulmonary impairment in SLE patients in the study. Study of the clinical particularities and assessment of diagnostical significance of laboratory parameters in patients with

systemic lupus erythematosus. Correlational analysis of clinical manifestations of pulmonary paraclinical indices and efficacy in patients with SLE.

Scientific innovation of the obtained results: Scientific innovation lies in deciphering certain etiopathogenic aspects, clinical, diagnostic methods and treatment principles of LUPSA erythematosus disease based on a clinical study analytically. In this analytical study were assessed overall and peculiarities of clinical laboratory changes in patients with systemic lupus erythematosus to them by the correlation index interpret organic damage of the disease.

The theoretical importance and value of the work: The paper aims to highlight the proportion of cases with clinical and laboratory manifestations, which gives Pulmonary severity and tracking progress under treatment. SLE is a collagenosis manifested by both cutaneous and musculoskeletal impairment, but also visceral, renal and pulmonary damage the nervous system dictates the evolution and prognosis. Through early detection and appropriate treatment setting, with regular monitoring, these developments may relieve severe in most situations.

The material and research methods: In accordance with the purpose and the investigational objectives outlined was made a retrospective descriptive study conducted on a group of 54 patients, 35 showed impaired SLE and 19 patients treated in clinical pulmonary Republican Hospital and the Hospital "Sf. Treime". In this study were included 54 patients, treated stationary PMS .S.C.R and "Sf. Treime" in 2013-2014.

Our results and discussion: Retrospective descriptive study was conducted to performance aspects: clinical course, diagnosis and treatment of lung injury, correlation incidence of systemic lupus erythematosus and pulmonary damage depending on age and sex.

138. EVALUATION OF PROTEASE-INHIBITORY BLOOD SYSTEM WITH GASTROESOPHAGEAL REFLUX DISEASE IN PATIENTS WITH DIABETES TYPE 2

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Savka Ruslan

The aim of our study was to investigate the condition of proteinase-inhibitor system of blood with gastroesophageal reflux disease (GERD) in patients with diabetes mellitus (DM) type 2.

Materials and methods: 7 patients with erosive GERD, combined with diabetes type 2 (1A group), 9 patients with nonerosive GERD with the diabetes type 2 (group 1B) in the background, 7 patients with erosive GERD, with no endocrine diseases detected during a detailed examination (group 2A), 8 patients with nonerosive GERD (2B group). The control group consisted of 10 healthy individuals (PCC) due to the age (3rd group). The evaluation of proteolytic activity was carried out by determining the level of lysis of asoalbumin, asokazein and azokol.

Results. It was established that in the absence of diabetes type 2 in patients with GERD occurs amplification lysis of small dispersed proteins to 94% in group 2A ($p < 0,05$) and to 8.9 % in group 2B ($p > 0,05$); lysis of large dispersed proteins – to 64 % ($p < 0,05$) and to 19,4% ($p > 0,05$); lysis of collagen - to 46 % ($p < 0,05$) and to 16,2% ($p > 0,05$), according to USO. GERD with the diabetes type 2 (group 1B) in the background (group 1B) is accompanied by increased lysis of asoalbumin to 114% in group 1A ($p < 0,05$) and to 13.8 % in group 1B ($p > 0,05$), lysis of asokazein to 109 % ($p < 0,05$) and to 37,9% ($p < 0,05$); azokol lysis to 47 % ($p < 0,05$) and to 21,6% ($p < 0,05$) according to the third group of patients. In patients with erosive GERD combined with diabetes type 2 and in the absence of it, the concentration of $\alpha 2$ - macroglobulin (MG) significantly decreased to 36,1% ($p < 0,05$) and to 29,6% ($p < 0,05$) according to the USO. In groups 1B and 2B, on the contrary, the level of $\alpha 2$ - MG increased compared with USO 2.5 times ($p < 0,05$) and 2times ($p < 0,05$), with the probable difference between them ($p < 0,05$).

Conclusion. GERD is accompanied by increased proteolytic activity of plasma in the background of reduction of $\alpha 2$ -MG (in the presence of erosions) and increased $\alpha 2$ -MG content (in the form nonerosive GERD).

Keywords: proteolysis, diabetes, gastroesophageal reflux disease.

139. ROLE OF THE RISK FACTORS IN CLINICAL COMPLICATIONS AND TYPES OF ACUTE MYOCARDIAL INFARCTION

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Introduction: Acute Myocardial Infarction (AMI) is a major cause of death and disability worldwide. The diagnosis of acute MI is a clinical diagnosis based on patient symptoms, ECG changes, and highly sensitive biochemical markers, as well as information gleaned from various imaging techniques. It is important to characterize the type of MI as well as the extent of the infarct, residual LV function, and the severity of CAD and other risk factors, rather than merely making a diagnosis of MI. The ideal management of ST-segment-elevation Myocardial Infarction (STEMI) and Non-STEMI involves early diagnosis followed by rapid reperfusion therapy (PCI).

Purpose and Objectives: Highlighting of importance correlation factors between, type of AMI, factors of risk and complication in patients without reperfusion therapy (PCI).

Materials and methods: The retrospective research was based on the archive data of the Municipal Hospital Clinic "Sfânta Treime". Patients (N=71) had a mean age of 64,3 years, diagnosis of different type of MI and history of hospitalization in "Intensive Care Unit". There were 2 periods of analysis (01.09.2012 to 31.10.2012 and 01.10.2013 to 31.12.2013). For data analyzes SPSS version 17 was used, $p < 0,05$ considered statistically significant.

Results: From 71 patients that were examined, were identified **common risk factor** for type 2 of AMI in 56 patients which are: Arterial Hypertension (HT) 2-3rd in 85.7%, diabetes type 2 in 35.7%, dyslipidemia in 28,6%, Chronic Heart Failure NYHA 2-3 in 23.2%, anemia in 7.1% and ischemic cardiomyopathy in 7.1%. For type 3 of AMI in 10 patients HT in 70%, diabetes type 2 in 40%, dyslipidemia in 10%, and type 1 of AMI 5 patients without known risk factors.

Also were identified **complication** for type 1 of AMI 5 patients: discirculatory encephalopathy in 40%, Killip 2, 3 and 4 each 20%. For type 2 of AMI 56 patients: Killip 2 in 50%, Killip 3 in 19.6%, Killip 4 in 10,8% other complications in 19,6%. For type 3 of AMI 10 patient: Killip 4 has 100%. The most common encountered complication for type 2 of AMI is Killip 2-findings of mild to moderate heart failure in 50%, and in type 3 are Killip 4 - cardiogenic shock in 100%.

Conclusion: HT is a common risk factor in more than 50% in type 2 and 3 of AMI in Intensive Care Unit. HT is a prevalent risk factor in type 2 and 3 of AMI. Therefore patients in Intensive Care Unit with HT 2-3rd degree must be treated as patients with high risk for developing type 3 of AMI and Killip 4. According to data we can assume that patients with advanced metabolic syndrome (characterized by dyslipidemia, hypertension and diabetes mellitus) mainly develop type 2 AMI.

Keywords: Killip, type of AMI, HT, Diabetes mellitus.

140. CONTACT DERMATITIS: ASPECTS OF ETIOLOGY, CLINICAL EVOLUTION AND THE TREATMENT

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Introduction: Contact dermatitis is a type of skin inflammation. It results from exposure to allergens (allergic contact dermatitis) or irritants (irritant contact dermatitis). Phototoxic dermatitis occurs when the allergen or irritant is activated by sunlight. Contact dermatitis occurs twice as frequently in women as in men and often starts at a young age, with a prevalence of 15% in 12-16 years old.

Purpose and Objectives: Studying the aspects of etiology, clinical evolution and the treatment of contact dermatitis.

Materials and methods: The study was conducted on a sample of 334 patients with contact

dermatitis, hospitalized in IMSP Hospital Dermatology and Communicable Diseases during January 2013 – December 2013.

Results: In the study was revealed the predominance of contact dermatitis in women – 208 patients (63%) as in men - 166 patients (37%), ratio M:F=1:1,65. The maximum number of cases refers to the age group 13-21 years (23,65%) and 51-65 years (20,36%), this is probably linked to the association of contact dermatitis with concomitant skin diseases characteristic for these groups (acne vulgaris, rozacea). Was observed the predominance in all age groups the drug reactions – 200 cases (59,88%). Cosmetic use (decorative cosmetics, creams, masks etc.) – 59 cases (17,66%) results in the appearance contact dermatitis in women after 13 years and is rare in children. Various chemicals – 11 cases (3,29%), disinfectants – 4 cases (1,20%), detergents – 6 cases (1,8%), contact with plants – 18 cases (5,39%) have a smaller share in the etiology of contact dermatitis. The majority of patients had localized skin process (72%) with skin rash in the form of papules and macules. The main subjective symptom is the itching – 311 cases (93%). Therapeutic success of contact dermatitis is the identification and discontinuation of contact with substance, desensitization therapy, antihistamines preparations and appropriate topical applications.

Conclusion: The contact dermatitis is a pathology with an increased incidence and prevalence. Is necessary as early as possible to recognize the disease and to identify the etiological agent. Timely and adequate treatment will improve the quality of life of patients and reduce the number of relapses of the contact dermatitis.

Keywords: allergic, contact, dermatitis, etiology, treatment.

ANTIBIOTIC SUSCEPTIBILITY OF BACTERIAL STRAINS ISOLATED FROM URINARY TRACT INFECTIONS

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Introduction: Urinary tract infections (UTIs) are one of the most common bacterial infections in humans both in the community and hospital setting. In almost all cases there is a need to start treatment before the final microbiological results are available. Area-specific monitoring studies aimed to gain knowledge about the type of pathogens responsible for UTIs and their resistance patterns may help the clinician to choose the right empirical treatment. Many different antimicrobial agents are available in Republic of Moldova, always on physician prescription, for the treatment of UTI. Furadonin, ciprofloxacin, norfloxacin, nitrofurantoin, first and second-generation cephalosporins and semi-synthetic penicillins with or without inhibitors and fosfomycin trometamol are the most commonly used antibacterial drugs in the treatment of UTI outside of the hospital.

Aim: The aim of this study was to obtain data on susceptibility patterns of major pathogens from both community and hospital UTIs in Republic of Moldova to antimicrobial agents currently used in the treatment of UTI.

Materials and methods:

The bacterial strains (n=1329) were isolated from urine specimens from 1101 patients who were hospitalized in Republican Clinical Hospital. Only patients who had pyuria and significant bacteriuria obtained from a clean-catch midstream urine sample were included in the microbiological analysis. Local laboratories performed identification to species level and antibiotic susceptibility testing by disc diffusion.

The antibiotics tested were ampicillin, amoxiclav, ceftazidime, ceftriaxone, meropenem, cefepime, doxycycline, netilmicin, norfloxacin, ciprofloxacin, nitrofurantoin, fosfomycin and others.

Results:

Results of antibiotic susceptibility testing of the isolated bacterial strains

1) **Escherichia coli.**

The antibiotic susceptibility rates for *Escherichia coli* were: ampicillin (47,3%), amoxiclav (54,7%), cefixime (71,5%), ceftazolin (12,5%), ceftazidime (38,3%), ceftriaxon (73,6%), nalidixic acid (63,7%), norfloxacin (82,9%), ciprofloxacin (74,8%), fosfomycin (99,2%), gentamicin (56,1%) and others.

2) Enterococcus faecalis.

The antibiotic susceptibility rates for *Enterococcus faecalis* were: ampicillin (92%), amoxiclav (94%), cefixime (3,7%), cefazolin (13,4%), ceftazidime (0%), ceftriaxon (30,9%), nalidixic acid (2%), norfloxacin (41,9%), ciprofloxacin (20%), fosfomycin (93%), gentamicin (3,2%) and others.

3) Klebsiella pneumonia. The antibiotic susceptibility rates for *Klebsiella pneumonia* were: ampicillin (5,1%), amoxiclav (23,6%), cefixime (35,6%), cefazolin (13,9%), ceftazidime (13,5%), ampicain (86,8%), imipenem (97,2%), ceftriaxon (45,9%), nalidixic acid (43,6%), norfloxacin (51,3%), ciprofloxacin (56,7%), fosfomycin (68,1%), gentamicin (42,9%) and others.

4) streptococcus β haemolyticus

The antibiotic susceptibility rates for *streptococcus β haemolyticus* were: ampicillin (88,7%), amoxiclav (100%), cefixime (66,7%), ceftriaxon (96%), nalidixic acid (1,6%), norfloxacin (50%), ciprofloxacin (54,8%), fosfomycin (88,6%) and others.

Concluzions:

This study conducted to determine the prevalence of UTI, the effect of gender and age on its prevalence, and their susceptibility profile in the community. This study provides valuable laboratory data to monitor the status of antimicrobial resistance among uropathogens and to improve treatment recommendations in a specific geographical region. The study also allows comparison of the situation in Republic of Moldova and outside the state.

Keywords: The antibiotic susceptibility, urinary tract infections, the bacterial strains

SURGICAL SCIENCES SECTION

1. CASE REPORT: TETRALOGY OF FALLOT – COMPLETE REPAIR

Arcan Grigore

Academic adviser: **Tinica Grigore**, M.D., Ph.D., Professor, Department of Cardio-Vascular Surgery, University of Medicine and Pharmacy "Gr. T. Popa", Iasi

Introduction: Tetralogy of Fallot is a complex malformation, with a frequency of 10% of the ACC. It is characterized by the presence of four elements: ventricular septal defect located above, pulmonary stenosis (at the infundibulum, valve or pulmonary artery), dextraposition of aorta and right ventricular hypertrophy. It can be associated with coarctation of the aorta, atrial septal defect, patent ductus arteriosus and left superior vena cava.

Material and Methods: Child, 5 years old, from rural areas, symptomatic by low threshold exertional dyspnea, with generalized cyanosis and a history of multiple episodes of respiratory infections, diagnosed postnatally with Tetralogy of Fallot.

The clinical and paraclinical examinations (ECG, Chest X-ray, Echo and cardiac catheterization) performed in our clinic confirm the diagnosis of Tetralogy of Fallot associated with patent foramen ovale.

Surgical treatment consisted of: closing of the ventricular septal defect with a Dacron patch via the tricuspid valve with separate threads with patches, closure of the patent foramen ovale, infundibular segmental resection and enlargement of the pulmonary artery trunk with autologous pericardial patch.

Results: Postoperative evolution was slowly favorable. Postoperative complications were: kidney failure, liver failure, chylothorax and febrile syndrome. These complications have been successfully treated in the ICU unit. Currently the patient has a good general condition, there is no residual exertional dyspnea or cyanosis.

Conclusion: Tetralogy of Fallot is a congenital heart disease that can be successfully treated if a correct diagnosis is made preoperatively, followed by using appropriate surgical techniques and a rigorous monitoring and management in the postoperative period.

Keywords: Tetralogy of Fallot, surgical treatment

2. ADVANTAGES AND DISADVANTAGES OF OPEN AND SEMI-OPEN ABDOMEN IN ACUTE PANCREATITIS

Balan Ilie, Juganaru Bogdan

Academic adviser: **Firescu Dorel**, M.D., Ph. D

Introduction: The study of clinical and laboratory evolution of patients diagnosed with severe acute pancreatitis (hemorrhagic -necrotic and suppurated) which have indication for surgical treatment with open or semi open abdomen and programmed re- intervention, advantages and disadvantages of applied methods. Acute pancreatitis as subject of this work was chosen because, by severity of the clinical picture, the reticent prognosis and high mortality after systemic effects of its severe form, it is known as "the great abdominal drama", framing by its evolution and complications one of the forms of abdominal sepsis.

Materials and methods: The study performed on a group of 30 patients diagnosed with severe acute pancreatitis, admitted to "Sfantul Apostol Andrei" Hospital of Galati, in Surgery 2 section, where they have been submitted to surgery and close/ semi opened drainage methods and programmed re-interventions. The patients' clinic evaluation was performed according to the Ranson Criteria and APACHE.

Results: Patients diagnosed with severe acute pancreatitis and their post surgical evolution remains a subject of scientific. Different opinions are not regarding the indication and optimal timing of surgery but how to achieve the drainage cavity and postoperative surgical follow. The

indication of surgery timing is established upon the clinical criteria which we obtain according to Ranson Criteria and APACHE.

Conclusions: The open abdomen method has as advantage the existence of a permanent access way to the pancreatic lodge, with secretion elimination and as well as contact with O₂ which does not allow the development of anaerobic bacteria.

Keywords: acute pancreatitis, surgery, Ranson criteria, APACHE

3. POST-INFARCTION LEFT VENTRICULAR ANEURYSM. REZULTS OF SURGICAL TREATMENT

Bostan Ghenadie

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Introduction: Even after the introduction of advanced methods in the treatment of acute myocardial infarction (MI), as early trombolysis, percutaneous coronary intervention (PCI), *Left Ventricular Aneurysm (LVA)* remains to be a severe mechanical complication encountered in 7-35% of cases. The study is intended to evaluate results of surgical remodeling of the left ventricle.

Material and Methods: Study is performed analyzing the evolution of ventricular size and it's function during the pre-, intra- and postoperative periods. Patients were operated at R.C.H. *Department of Cardiac Surgery* and „MEDPARK” International Hospital. Preferred time for the surgery is 3 months after an acute MI, allowing wall area to scar and delineate well which enables to determine the akinetic/dyskinetic zones and application of sutures after choosing the method of plasty. Plasty techniques at the moment are: aneurysmoraphy, resection of the aneurysm with linear suturing (*Mickleboroughe*), remodeling technical procedures (*Dor, Colley, Jatane*). In most of the cases was performed coronary artery bypass grafting for myocardial reperfusion. In this study were included 180 operated patients: 150 men and 30 women, with a mean age 58(41-76) years. Concomitant procedure included: papillary muscle sling (according to *Hvass technique*) – 42 cases, mitral valve annuloplasty – 51 cases. The mean preoperative LV ejection fraction (EF) was 36%, the mean LV diastolic volume 241 ml, and mean LV systolic volume was 112 ml. One of the purposes is to diagnose more efficiently the heart chambers, their vascularization. Posoperatively patients are well monitored to see their evolution by checking general clinical condition and cardiac chambers dimensions (*EchoCG*).

Results: The mortality is 6 times higher in patients who suffered MI with formation of ventricular aneurysm with or without low ejection fraction than in the patients who did not develop LVA. All operated patients have 4,9% lethality risk. The causes of death were low cardiac output syndrome, multi-organic insufficiencies and irreversible ventricular fibrillation. Five year-survival after the surgery is 87% and up to 10 years survival is in 60-65%. Heart failure III-IV (*NYHA*) was in 92%; the localization of the LVA was on the antero-apical wall, found in 92%. Intraventricular thrombus was detected in 35,2% of cases. Also was attested improvement in the ejection fraction from 36% to 50% and the average LV end diastolic volume decreased from 241 ml to 165 ml and LV end systolic volume from 112 to 81ml.

Conclusion: Surgical reconstruction of LVA, associated with a complete myocardial revascularization and concomitant procedure (papillary muscle approximation and correction of ischemic mitral regurgitations) lead to good outcomes for patients in follow up period.

Key words: acute myocardial infarction, left ventricular aneurysm, aneurysmorrhaphy, surgical treatment, aortocoronarian by-pass

4. VASCULAR COMPLICATIONS AMONG INTRAVENOUS DRUG ADDICTS

Bzovii Florin, Culiuc Vasile

Academic adviser: Guțu Eugen, M.D., Ph.D., Professor of Surgery, Chief of Department of General Surgery and Semiology, State University of Medicine and Pharmacy "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Drug addiction is one of the major medico-social problems in many countries. Intravenous injection is the most dangerous but one of the favorite drug assumption modality. Each drug injection carries a risk of vascular lesion. The literature describes many vascular complications among intravenous drug addicts such as venous thrombosis, septic thrombophlebitis, artery necrosis, arteriovenous fistula, sinus track, mycotic aneurysm, dissecting hematoma and pseudoaneurysm formation. The aim of this study is to identify most common patterns of vascular injuries and to analyze their treatment modalities among intravenous drug addicts.

Materials and Methods: Data of 24 patients hospitalized during the six years period with vascular complications after intravenous drug injections were retrospectively analyzed.

Results: Twenty (83.3%) pts had an age up to 30 years. Vessels involvement was confirmed by imaging exam: angiography (n=2) or vascular ultrasound (n=22). The types of vascular complications (all at the level of lower limbs) which serve as indications for hospitalization of drug addicts are listed as follows: (1) 4 patients have been identified with infections of femoral artery's pseudoaneurysm, (2) 1 patient had an aneurysm of popliteal artery, (3) deep venous thrombosis was seen in 11 patients, (4) venous inguinal sinus track with haemorrhage – in 3 patients, (5) postthrombotic syndrome – in 5 patients. Two patients were diagnosed with concomitant human immunodeficiency virus causing the acquired immunodeficiency syndrome, and 54.16% had viral hepatitis. Four drug addicts developed hemorrhagic shock due to profuse hemorrhage from the level of vascular lesion. In one patient with femoral arterial pseudoaneurysm emergent iliofemoral bypass using autogenous vein was performed. In other three pts triple arterial ligation has been primary selected to solve the cases. All inguinal venous sinus tracks complicated with profuse bleeding were closed by applying continuous suture using synthetic non-absorbable thread - polypropylene 5/0. Remained patients received conservative treatment. High amputation of affected limb was necessary in one drug addict. There were no cases of death during hospitalization.

Conclusion: The primary goal of surgical treatment of vascular complications in intravenous drug addicts should be prevention of life-threatening clinical conditions. Arterial ligation is an acceptable curative option in cases of erupted/infected femoral artery pseudoaneurysm in drug addicts. **Physicians** should have a high index of suspicion for vascular problems among this contingent of patients, because they often neglect their illnesses and become difficult to treat.

Keywords: intravenous drug addicts, vascular complications

5. COMPLICATIONS AFTER ENDOSCOPIC PAPILOSPHINCTEROTOMY

Cătărau Olesea

Academic adviser: Lescov Vitalie, University assistant, M.D., Department Surgery no.1 "Nicolae Anestiadi", State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Endoscopic papillosphincterotomy (EPS) is now widely used to remove bile-duct stones and to treat other problems, with mortality less than 2%. Most complications following the procedure are apparent within 24 hours and some will require emergency surgery. An awareness of the potential complications is important so that prompt and effective treatment can be instigated. Highlighting of the frequency of complications after EPS, the risk factors for complications of this procedure, their diagnosis and management, on behalf of literature and retrospective analysis of patients have undergone the procedure.

Materials and methods: The study is based on the analysis of complications after EPS in patients whom undergone the procedure, performed in the surgical clinic of the National Scientific-Practical Center of Emergency Medicine in Chisinau, in the time period of 2006-2013.

Complications after procedure occurred in 40 cases. The study group was formed by 28 (70%) women and 12 (30%) men. Average age was 53.5 ± 17.18 (95% CI: 48.01 – 58.99) years. In all cases EPS was performed with an Olympus duodenoscope JFIT-10, JF-10 or Pentax and the Demling and needle-knife sphincterotomes. We used descriptive statistics.

Results: Of the 807 patients who underwent the EPS, complications occurred in 40 (4.95%) cases and were commoner when EPS was performed for papillary stenosis (16.2%) than for CBD calculi (10.3%). Procedure-induced pancreatitis accounted more than half of complications (29 patients) and included all patients with severe abdominal pain and a serum amylase >1000 IU/l. Evidence of bleeding were found in 9 patients (1.2% of all EPS) and included all patients with haematemesis or melena following EPS. Retroperitoneal perforation was clinically evident in two patients. We did not encounter any case of death.

Conclusion: The introducing of EPS has added a new dimension to the treatment of biliary tract disease. The number of patients undergoing EPS is increasing as the technique is applied more widely. The type and frequency of complications of endoscopic papillosphincterotomy varied widely in different circumstances. Complications appear to be related primarily to the clinical indication for the procedure, to the characteristics of patients and to the endoscopic techniques, rather than to the age or gender of the patient. A correct preoperative management, access to advanced instruments and following the principles of endoscopic technique decreases the rate of complications.

Keywords: Endoscopic papillosphincterotomy, complications, management

6. MINI-INVASIVE TREATMENT AND DIAGNOSTIC OF ISCHEMIC HEART DISEASE

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Introduction: Heart diseases represent the main causes of the early dead all over the world. The total number of deaths during the year 2008 induced by heart disease where almost 17, 3 billions, this number represent 30% from mortality all over the earth. In our country 55% of deaths are provoked by ischemic heart disease. The primary cause is produced by atherosclerotic plaque in the coronary arteries with the main syndromes acute coronary syndromes (ACS), including unstable angina and acute myocardial infarction (AMI), and sudden cardiac death. To show the importance of coronary angiography like a diagnostic method, and to analyze the frequency of coronary main vessels affections, the role of risk factors and methods of treatments.

Materials and Methods: In the study where included 60 patients with defined diagnosis of ischemic heart disease, 76, 7% men and 23, 3% women, median age 59 years old (range 44-77). After coronary angiography we established that the main coronary perfusion was right one 50%. The left main coronary perfusion was on 36.7 % of patients, and intermediate coronary perfusion was on 13.3% cases. We analyzed the patients' complaints, disease history, and the results of the clinical and laboratory examination, Coronary angiography, electrocardiography (ECG) in the rest, transthoracic echocardiography (Eco CG), Doppler Eco CG.

Results: In the study group where prevailed patients with a lot of risk factors, like Hypertension 35 patients (58.3%), dyslipidemia 28 cases (46.6%), smoke 40 (67%), diabetes 21 patients (35%), stabile angina 38 patients (64%) , instable angina 22 patients (36.6%). The most affected coronary was Left Anterior Descending branch (LAD) 24 patients (40.77%). Right coronary artery (RCA) was affected on 18 patients (30.7%), Circumflex coronary artery (CX) 14 patients (24.6%) and the main Left branch (LM) 3 patients (3.85%). Tri-coronary affections 31 patients (53.3%), bi- coronary affections 10 patients (16.7%), and one coronary affection 18 patients (30%). The coronary lesion data in our study showed that the 25% of lumen vessel lesion was the most frequently. The artery lesion between 75 and 99% was also very frequently. The 100% artery lesion was at 7 patients. Like a method of treatment Percutaneous Coronary Angioplasty (PTCA) was elected like a method of treatment for 28 patients (46.7%).

Conclusion: Our data showed that coronary angiography was the most informative method of

diagnostic. The presence of the risk factors showed a high incidence of the multiple coronary affections. The study has indicated that the coronary vessels with a bigger lumen were more affected.

Keywords: ischemic heart disease, stable angina, coronary angiography, echocardiography

7. ENDOSCOPIC VARICEAL BANDING - AS A MODALITY TO IMPROVE QUALITY OF LIFE OF CIRRHOTIC PATIENTS

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Introduction: The prevalence of varices in patients with cirrhosis is approximately 50%, 2/3 are at high risk of developing variceal bleeding, in 30% of cases bleeding occurs. Mortality rates from the first bleeding episode are estimated to range from 30% to 50%. The risk of rebleeding is 70% in following 2 years with a mortality rate of 30%. Nowadays, modern endoscopy created new possibilities for effective treatment of both bleeding and nonbleeding varices. Therefore, researching quality of life (QL) is an actual issue, besides improving it in patients with liver deficiency became a necessary condition in medical practice. Identifying the effect of endoscopic variceal banding (EVB) on disease evolution and QL in patients with chronic liver disease.

Materials and methods: This study consists of 53 patients with established diagnosis of viral liver cirrhosis and esophageal varices (EV) with high risk of bleeding. All patients had undergone endoscopic prophylactic eradication of EV in nonbleeding state using EBV. Additionally, the SF-36 score was used to evaluate the post-treatment QL, which consist of 36 questions and a broad spectrum of activity.

Results: There were 19 men and 34 women with a mean age of 45.1 years. According to the Child's classification, 22 patients were in Child's B and 31 in Child's C. Vast majority of patients (84.3%) presented with EV grade III were associated in 5 cases with gastric fundic varices type II. Summing, 98 ligation sessions were done on 53 patients presented with EV with high risk of bleeding. Pharmacological therapy was considered in all patients. Ligation of EV were performed using 3 to 9 rubber bands placed in esophagocardial region, in a helical formation, starting distally and moving upward. The number of sessions ranges from 2 to 4, depending on grade and anatomic variations of EV. Serious accidents and incidents during EBV did not occur. The follow-up endoscopy 12-18 days after ligation showed complete or partial eradication of EV in 38 patients during the first session, in 9 patients after 2, in 4 after 3 and in 2 after 4 sessions. SF-36 score established that EBV has a positive influence on QL at a rate of 73% of the respondents (physical scale) and 51% (mental health scale).

Conclusion: Endoscopic variceal banding is an effective method in primary prophylaxis against variceal hemorrhage and very important for improving quality of life of those patients.

Key words: endoscopic variceal banding, esophageal varices

8. THE INFLUENCE OF LASER ON VARICOSE VEINS AND ITS PRACTICAL ROLE IN THE ENDOVASCULAR LASER OBLITERATION (EVLO)

Conţu Angelica

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Introduction: Modern phlebology supported a conceptual metamorphosis through the implementation of the endovascular laser obliteration (EVLO). Of course, some aspects of the laser influence are yet to be explored, however our objective implied the study of the endovenous laser influence on the venous wall, through a practical use aspect.

Materials and methods: The research was based on studying the in vitro laser impact on 12 vein fragments, which had been extracted intraoperative through stripping. We used a diode laser, model Valure S9 (940 nm wavelength).

Results: We modeled, in vitro, the process of EVLO, during which 24 halves of veins were closed and 12 of them were filled with heparinized blood, while other 12 ones – with saline solution 0.9%. In the lumen of each vein we introduced a 600 mcm optical fiber, and applied an energy of 30 J/cm. In case of veins filled with heparinized blood, the last one boiled, forming a gas, composed of blood combustion products. In addition, veins' diameter did not decrease after chilling. The combustion products deposited on veins' walls, which we histological proved after that. In case of veins filled with sodium chloride 0.9%, the process of boiling happened more difficultly, and it decreased in diameter after cooling. Also, the laser impact on the vascular wall seemed to be much more reduced in veins with sodium chloride 0.9%, rather than in ones with heparinized blood.

Conclusions: (1) The obliterative influence of laser on varicose veins happens, first of all, because the laser energy is absorbed by blood. (2) The blood vaporization takes place forming gas and combustion products. (3) In order to correctly accomplish the surgical intervention, it makes sense to realize an intraoperative procedure, named Troianov-Trendelenburg, which avoids the blood combustion products to migrate into the blood circuit.

Key words: endovenous laser obliteration, combustion products

9. USING RABBITS AS EXPERIMENTAL ANIMALS FOR MODELING APPENDECTOMY DURING PRACTICE-ORIENTED TRAININGS AS AN ALTERNATIVE TO ENGAGING IN AN EXPERIMENT DOGS

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Academic adviser: Khimich Alexey, assistant of the Department of Operative surgery and topographic anatomy, National Pirogov Memorial Medical University, Vinnytsya, Ukraine

Introduction: Among the diseases of the abdominal cavity, requiring immediate surgery, the most frequent acute appendicitis. In connection with the execution of the rules of the obligation of experimental work in experimental animals, we are unable to demonstrate the technique of appendectomy on dogs because considered appropriate to use rabbits as an alternative et o engaging in an experiment dogs.

Purpose and Objectives: To compare the topographic-anatomic location and structure of the appendix of rabbit with a human, as well as to simulate and compare the stages of appendectomy.

Materials and Methods: After studying and analyzing the literature data concerning the location and topographic anatomical structure of abdominal viscera clinically healthy rabbit, and the study of this issue in the anatomical dissection of the rabbit, we have carried out a number of appendectomies in experimental animals as follows: after general anesthesia by intramuscular injection of 10% solution of sodium thiopental (0.5 ml per 1 kg of body weight), was carried out fixing the animal and site preparation section. The abdomen was opened through a midline incision average. Peritoneum isolated gauze. Conducted an audit of the abdominal cavity. Finding the cecum with vermiform appendix removed the min to the wound. Further mobilization process was carried out, direct ligation of the segmental branches outside the walls of the appendix, and the vessels going to the adjacent intestinal loop, and bandaging the appendicular artery. After mobilization, the base of the appendix silk ligature was applied, above which the process of crossing. Stump was treated with 5 % solution of iodine. Inspection has been performed and hemostasis layers sutured abdominal wall.

Results: Comparison of topographic and anatomical features of the location and structure of the appendix with a human rabbit showed that these anatomical structures are very close. Accordingly, the technique of surgery carried out was close to an appendectomy in humans.

Conclusions: Based on the comparison of topographic and anatomical peculiarities of the location and structure of the appendix, as well as of surgery in rabbits can be concluded that the use of rabbits as experimental animals for modeling appendectomy during practice-oriented training as an alternative et o engaging in experimental dogs is reasonable and will allow students to virtually secure knowledge of the topic and to gain practical experience of surgical intervention.

Key words: Appendectomy, rabbits, experiment

10. COMPARATIVE STUDY FOR COLORECTAL PATOLOGY IN TWO DIFFERENT COUNTRIES: ROMANIA AND ITALY

Dana-Ioana Dumitru, Gianni Versari

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Introduction: Colorectal surgery refers to a variety of procedures used to repair damage to the colon, rectum, anus and pelvic floor caused by diseases of the lower digestive tract, such as cancer, diverticulitis and inflammatory bowel disease.

Materials and Methods: One thousand consecutive patients who undergone colorectal surgery, at the Department of general surgery and emergency of the University of Bologna, St.Orsola Hospital, were included in this retrospective study (Group 1). These patients were compared with the last 1000 patients who had colorectal surgery at Clinical County Hospital of Targu Mures (Group 2). The parameters analyzed included: age, sex, type of disease, type of presentation of the disease, TNM score and grading for malignant disease, emergency or elective surgery, type of operation, curative or palliative surgery, type of surgical approach (laparoscopy or laparotomy), mechanical or manual anastomosis, duration of operation, blood loss, transfusions, operative morbidity, mortality and hospital length of stay. SPSS statistical software was used for all statistical analyses.

Results: Significant differences between the two groups were found within the incidence of different diseases: in Group 1, patients operated for cancers were the majority with a percentage of 48,06%, while diverticular disease was found in 13,87% of patients. In Group 2, cancers were 74,0% while diverticular disease was less representative with a percentage of 2,5%. This could be probably be explained by differences in dietary habits within the patients in the two groups. There were no statistically significant differences in mortality, morbidity and hospital stay between the two groups. Post-operative 30-day mortality, morbidity for all causes and hospital length of stay were respectively 3,69%, 32,88% (urgency: 42,39%, elective: 28,64%) and 9,67 days (urgency: 10,29; elective: 9,42) in Group 1, while were 6,7%, 25,1% (urgency: 11,74% elective: 13,08%) and 11,12 (urgency: 5,25; elective: 5,86) days in group 2. However the percentage of palliative operation was higher in group 2 probably because of a more delayed diagnosis. This could be explained with the use of an accurate local program of colonic cancers screening that take place in Bologna.

Conclusions: The results of study show that colorectal pathology and surgery complication of these two countries are very similar, without representative differences, just a higher frequency of diverticular disease in Italy and a problem of screening for colorectal cancer in Romania.

Key words: colon diverticula, surgery, screening

11. CORONARY SINUS RECONSTRUCTION – 2 CASES REPORT

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Introduction: Coronary sinus and ostium primum (unique atrium type) atrial septal defects (ASD) represent rare congenital malformations (less than 1% of total ASDs) and are frequently associated with persistent left superior vena cava (LSVC). The shunt is caused in the first case by the incomplete development of the wall between the coronary sinus and the left atrium and in the second case, the coronary sinus drains into the single atrial cavity.

Case description: Two patients (I. P., 15 years, B. G., 12 years) were operated in 2013 in our clinic. In the first case, although enlargement of the coronary sinus was not identified during echography, angio-CT showed fenestration of the coronary sinus wall and cardiac catheterization documented the bidirectional shunt as well as the persistent LSVC. Moreover, the ASD was associated

with patent ductus arteriosus and cor triatriatum. In the second case the ostium primum ASD and the persistent LSVC as well as an anterior mitral valve cleft were diagnosed by echography and CT. Both patients underwent elective surgery. The coronary sinus was reconstructed in both cases using autologous pericardial patches. Moreover, in the first patient the ductus arteriosus was ligated and the intraatrial trabeculum was excised. In the second case the interatrial septum was reconstructed with autologous pericardium. Both cases had an unremarkable postoperative recovery.

Conclusions: Both cases showed that although the diagnosis for these malformations requires multiple investigations, a surgical correction with good long term results is feasible if the mechanism of the shunt is well documented.

Key words: Coronary sinus reconstruction, ostium primum

12. TEXTILOMAS OF ABDOMINAL CAVITY

Guțu Serghei

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Introduction: The term "textiloma" denotes a textile foreign body that is retained inside the patient during surgery. Intra-abdominal textilomas are a rare condition, which is reported non-frequently. Their natural evolution is unclear, whereas diagnosis and treatment are difficult and not standardized.

Purpose and Objectives: To assess the features of presentation, reliability of preoperative diagnostic methods, and treatment modalities in patients with textilomas.

Materials and methods: During 12-years period three patients with suspicions on retained textile foreign bodies were admitted in the National Center of Emergency Medicine. Males – 2, female – 1, with median age 26.6 years. In the past all patients underwent urgent surgical procedures: for penetrating abdominal wounds (2) and ruptured ectopic gestation (1). Time to readmission after first surgery was 9 days, 8 years, and 60 days, respectively. Examination included routine laboratory tests, abdominal ultrasound, and computed tomography in all cases.

Results and discussion; On the basis of imaging studies the diagnosis of intraabdominal postoperative abscess was supposed in two patients, and a gastric tumor – in one. The ultrasound scan features included a well-defined mass with a hypoechoic rim and a strong posterior shadow. Abdominal computed tomography revealed a well-defined "spongiform" mass with gas bubbles inside. All three patients had repeated surgery with removing foreign bodies and drainage of the residual cavity (2 cases), and subtotal gastrectomy en bloc with textiloma (in one). All patients had a complicated postoperative recovery with length of in-hospital stay 50, 39 and 33 days, respectively.

Conclusions: The possibility of textiloma should be in the differential diagnosis of any postoperative patient, who presents with signs of peritoneal infection or with abdominal mass. Repeated surgery is required for removing foreign bodies from abdominal cavity. Avoidance of leaving foreign bodies inside the patients could be possible by careful count of surgical materials, and thorough exploration of the surgical site.

Key words: Textiloma, abdominal cavity, imaging studies, repeated surgery

13. MITRO-AORTIC SUBACUTE BACTERIAL ENDOCARDITIS IN A PATIENT WITH SITUS INVERSUS TOTALIS

Guțuleac Virgiliu

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Introduction: Situs inversus is a genetic disorder in which the main organs are in reversed position inside the human body (mirror image). The situation in which the heart is positioned on the right side of the thorax is known as situs inversus with dextrocardia or situs inversus totalis. If the heart

remains on the normal left side of the thorax, we can speak about a much rarer condition (1 in 22.000 of the general population) known as situs inversus with *levocardia* or situs inversus incompletus.

Material and Methods: In this paper we refer to a 42 years old patient with situs inversus totalis and cardiovascular pathology due to subacute bacterial endocarditis of the aortic valve complicated with the perforation of the anterior cusp of mitral valve associated with severe aortic regurgitation and moderate mitral regurgitation, NYHA class IV heart failure admitted in IBCV "Prof. Dr. George I. M. Georgescu" Iași for dyspnea at rest, fatigue, swelling of the lower limbs, cough. Preoperative invasive and noninvasive examination revealed multiple cardiovascular injuries. The surgical approach was aortic valve replacement with mechanical prosthesis and reconstruction of the anterior leaflet of the mitral valve with autologous pericardial patch.

Results: The post-operative evolution was favorable and the control echocardiography showed normofunctional aortic valve prosthesis and normal coaptation of the mitral valve leaflets with no signs of cardiac decompensation.

Conclusion: Dextrocardia is a rarely seen cardiac malposition, often associated with multiple and complex congenital cardiac anomalies. Valve surgery for acquired valvular lesions in dextrocardia with situs inversus is also rare. Surgeons require a prospective strategy for handling problems such as poor exposure of the cannulation site and diseased valve. The case illustrates the anatomic issues and operative considerations particular to aortic and mitral valve surgery in patients with this condition.

Key words: Situs inversus, mitro-aortic endocarditis, aortic insufficiency, anterior mitral valve perforation

14. THE EXTRAANATOMIC BY-PASS IN VASCULAR SURGERY

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Introduction: The term "extraanatomic" is used to outline vascular grafts, the paths of which lie through regions completely different from the arteries they by-pass. Although modern vascular surgery upholds several extraanatomic by-pass procedures, the precise indications for these surgical interventions, as well as the selection of patients and the proper surgical technique, have not been completely set yet.

Purpose and objectives: The study aims to assess the specific indications for extraanatomic by-pass, the proper surgical technique and patient selection.

Materials and methods: 13 extraanatomical by-passes were performed during the period of 2010-2014. All patients fell into 3 groups:

-Critical inferior limb ischaemia associated with advanced cardio-vascular and pulmonary pathology (n=6): all patients underwent femuro- or ilio-femoral cross-overs. -Suppurative processes (n=3): all patients underwent femuro-femoral or ilio-femoral cross-overs.

-Vascular trauma (n=4) associated with damage and infection of adjacent tissues: 2 crossovers (1 ilio-femoral and 1 femuro-femoral) in case of ilio-femoral axis damage, 1 femuro-popliteal by-pass (graft placed subcutaneously), 1 suprafascial brachio-brachial by-pass.

Results: The results highly depend on the vascular bed patency. Patients in critical limb ischaemia with obliterant atherosclerotic background, advanced cardiovascular and pulmonary diseases or those with suppurative processes are prone to a poor vascular bed. In the first 2 groups, 1 femuro-femoral by-pass thrombosed in the immediate postoperative period (amputation was required), 2 of them remained patent up to 6 months, 2 of them up to 1 year and the other 4 cross-overs more than 1 year. In the third group, all by-passes remained patent during all follow-up period (up to 8 years).

Conclusions: Extraanatomical by-passes serve as an alternative to classical revascularization in certain groups of patients. These procedures are especially indicated in patients with contaminated vascular grafts or suppurative processes. Another group of patients are those with

advanced cardio-vascular and pulmonary diseases. Axilo-femoral and femuro-femoral by-passes being far less traumatic than their aortofemoral counterpart (although hemodynamically less favorable) are indicated in arteriopathic patients to save limbs in critical ischaemia, but not to treat intermittent claudication. In patients with vascular trauma associated with infected wounds, the extraanatomical by-pass is the procedure of choice.

Keywords: Extraanatomical by-pass, vascular grafts, crossover by-pass

15. NONTHERAPEUTICAL EXPLORATORY LAPAROTOMY VS HEMOPERITONEUM SOLVED NONOPERATORY: EXPERIMENTAL STUDY BY COMPARISON

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Introduction: The nonoperatory approach to patients with traumatic injuries of intraabdominal parenchymal organs with hemoperitoneum considering its local and systemic effects still represents an issue discussed and controversial because of yet unknown evolutionary aspects of hemoperitoneum. The morphological, biochemical and bacteriological analysis of hemoperitoneum solved nonoperatory in comparison to the changes induced exploratory laparotomy by means of experimental study.

Materials and methods: 23 rats, divided in: group I (n=17) – hemoperitoneum with nonoperatory approach (HP-TNO), which has been introduced integral blood intraperitoneal (V=3,0 ml); group II (n=6) – exploratory laparotomy (LE). The rats were sacrificed after 25 days, the adhesion process were noted using known scores, biochemical and bacteriological modifications also.

Results: Adhesions were observed in the entire LE group of rats (100%) and only in 13,3% HP-TNO group (p<0,05). Adhesions in the LE group was vascularized and significantly thicker and more resistant (p<0,05), in LE group adhesions involved from 25% to 75% of the injured surface in comparison to HP-TNO group where adhesions involved only less than 25% surface from the initial place of blood inoculation. All 25 adhesions (in 6 rats) in the LE group were divided, according to Binda, as follows: 2 - gr. I, 15 - gr. II, and 8 - gr. III versus HP-TNO group with 2 - gr. I adhesions. The adhesions total score was significantly higher in LE group. The blood collected from rats was examined biochemically to determine medium molecular weight substances (SMMM), necrotic substances (SN), urea, serum iron and total protein. We found significantly higher level of SMMM in LE group (p<0,05), indicating increased protein degradation processes. It was established also an insignificant prevalence value of SN in LE group indicating increased inflammatory process. The peritoneal fluid and mesenteric lymph nodes cultures showed no bacterial growth, which means no bacterial translocation in both groups of rats.

Conclusion: The experimental study demonstrates that nonoperatory treatment of hemoperitoneum does not involve additional risks and is less aggressive than nontherapeutic exploratory laparotomy this is confirmed by significantly lower adhesion process and biochemical indices showing predominance of degradation processes in rats with laparotomy. The negative bacteriological tests invalidate the bacterial translocation hypothesis under haemoperitoneum.

Key words: hemoperitoneum, nonoperatory treatment, exploratory laparotomy

16. TRAUMATIC DIAPHRAGMATIC RUPTURES

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Introduction: Traumatic diaphragmatic ruptures (TDR) present significant diagnostic challenge and are potentially fatal. TDR are uncommon, the best majority being induced by blunt abdominal trauma, still these can be induced by abdominal, thoracic or thoraco-abdominal wounds.

Material and Methods: During February 2012 – March 2014, in our department were treated 19 patients with TDR. Etiology, site and injury dimensions, ISS and RTS scores, method and treatment results were analyzed.

Results: There were 16 (84.21%) males and 3 (15.79%) females, with the mean age 30.05 ± 10.36 (95% CI 25.06 – 35.04) years. Male:female ratio was 5.33:1. Blunt trauma was observed in 7 (36.84%), while wounds were diagnosed in 12 (63.16%) cases. The left diaphragm was injured in 12 (63.16%) and the right-one – in 7 (36.84%) cases. The mean injury size was 7.5 ± 6.1 (95% CI 4.55-10.44) cm. Left-sided mean injury size was 6.41 ± 5.39 cm (95% CI 2.98-9.84), right-sided mean injury size was 5.5 ± 6.69 cm (95% CI – 0.68-11.69) ($p=0.52$). The mean ISS and RTS were 22.53 ± 12.32 (95% CI – 16.59-28.46) and 7.342 ± 1.053 (95% CI – 6.834-7.849) respectively. In 13 (68.42%) cases the diagnosis was established < 12 h; in 1 (5.26%) 13-24 h and in 5 (26.32%) > 24 h after admission. Preoperative TDR was diagnosed in 9 (47.36%) cases by thoraco-abdominal X-Ray and CT. In all the cases the lesions were sutured using permanent sutures (15 by laparotomy, 1 by right-sided thoracotomy, 1 laparoscopically, 1 by laprotomy with right-sided thoracotomy and 1 by laprotomy with left-sided thoracotomy). Postoperative death-rate was 1 (5.26%).

Conclusions: The left part of the diaphragm is more frequently affected. Preoperative diagnosis is difficult.

Keywords: trauma, diaphragm, injury

17. MORPHOLOGICAL ARGUMENTATIONS IN COMPLICATIONS OF ESOPHAGEAL ATRESIA WITH LOWER ESOTRACHEAL FISTULA

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Introduction: Despite the notable success achieved in the treatment of esophageal atresia, the respiratory and gastrointestinal complications are observed quite frequently, some of them persisting throughout the whole life. Esophageal motility disorders occurring after successful surgical treatment of esophageal atresia with tracheoesophageal fistula are quite common, the etiology of which remains controversial. Anastomotic dehiscences, dysphagia, gastroesophageal reflux, impaired or absent peristalsis are the changes recorded clinically, radiologically, scintigraphically and endoscopically.

Purpose and Objectives: to analyze the spectrum of pathomorphological changes revealed in both atretic segments of the esophagus in cases of esophageal atresia with lower esophageal-tracheal fistula responsible for the development and evolution of postoperative complications.

Materials and Methods: The histopathological study was performed on 21 cases, which included necropsy material performed on unoperated specimens from 8 newborns with esophageal atresia and distal tracheoesophageal fistula, in 13 cases - from operated newborns. Evaluation of macro- microanatomic peculiarities in esophageal atresia with lower esotracheal fistula was performed at 3 levels: upper atretic segment, esotracheal fistula level and lower segment. Serial sections were made of both the proximal segment (blunt) of the esophagus and distal segment with fistula. Methods for staining with hematoxylin-eosin, van Gieson and orceine were used.

Results of this study allowed to conclude:

- Presence of advanced structural pathomorphological changes can significantly influence the regenerative-reparative processes of the esophagus after reconstructive operations in cases of esophageal atresia with distal tracheoesophageal fistula.
- Fibro-muscular dysplastic changes concomitant with pathological changes of ganglioneuronal structures are responsible for oesophageal motility disorders after reconstructive operations in cases of esophageal atresia with distal tracheoesophageal fistula.
- In cases of esophageal atresia with distal tracheoesophageal fistula some concomitant structural defects may be present (non-communicating intramural duplicates of the proximal atretic segment, communicating esophageal duplicates of the distal segment) that remain undiagnosed preoperatively and during surgery, causing significant postoperative complications including anastomosis failure.

• Presence of islets of foveolar gastric mucosa in the distal segment with tracheoesophageal fistula could be a favorable morphological substrate for development of Barrett's esophagus in patients with esophageal atresia.

Keywords: esophageal atresia, fistula, pathomorphology

18. DIAGNOSIS AND SURGICAL APPROACH IN ACUTE APPENDICITIS

Perciuleac Ion

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Introduction. Acute appendicitis(AA) is the most common cause of acute abdominal surgical pathology. Usually, the diagnosis is based on a detailed history and a thorough clinical examination. However, there are groups of patients in whom the diagnosis is difficult because of the wide variety of clinical manifestations.

The aim of the study is to analyze the group of patients admitted with suspected acute appendicitis, rate of the cases with uncertain clinical presentation, medical and surgical approach of these patients and to determine the pathologies simulating acute appendicitis in order to avoid misdiagnosis.

Materials and methods. During 2011-2013, in Surgical Clinic No. 1 "Nicolae Anestiadi " were admitted 2568 patients with suspected acute appendicitis. Women were 1602 (62.38%), men - 966(37.62%). The mean age was 33.62 ± 17.07 years. The number of patients of working age was 2282(88.86%), those over 60 years - 286(11.14%).As diagnostic methods have been used clinical examination and laparoscopic examination.

Results. In 1494(58.18%) patients the diagnosis was established by history and physical examination, which were operated immediately. In 50 (1.95%) cases appendicular mass was found. Diagnostic laparoscopy performed on admission in 315 (12.27 %) cases confirmed AA in 151 (47.9%) patients, in 15 cases - appendicular mass, in 76(24.1%) cases other pathology and in 73(23,17) cases-no pathology. The remaining 709(27.60%) patients were hospitalized for dynamic supervision. Of them: in 103(14.53%) cases AA was found, in 131(18,47%) - other pathology and 271(38,22%) patients were discharged with intestinal colic. In 204(28,77%) cases laparoscopy after observation was performed. Of them: in 51(25%) cases AA was confirmed, in 67(32,8%)- other pathology, in 86(42,2%) – pathology was excluded. In 143 patients AA was simulated by: gynecological pathology in 84(58.8%) cases, perforated ulcer in 27(18.9%), colecystopancreatitis in 7(4.8%) cases,mezadenitis in 11(7.7%) patients and other pathology in 14(9.8%) cases, confirmed by laparoscopy at admission and after observation.

Conclusions. For diagnosis of AA in patients with unclear clinical presentation and other pathologies that simulate AA, laparoscopic exam is indicated at admission. Patients with uncertain clinical presentation at admission require hospitalization, observation in dynamic and, if necessary, laparoscopy after observation.

Keywords: AA, uncertain clinical presentation, laparoscopy

19. PREGNANCY AND HEART DISEASE

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Introduction: At present, 0.2–4% of all pregnancies in western industrialized countries are complicated by cardiovascular diseases (CVD). Guidelines on disease management in pregnancy are of great relevance. Such guidelines have to give special consideration to the fact that all measures concern not only the mother, but the fetus as well. Some general conclusions have arisen from these guidelines:

counselling and management of women of childbearing age with suspected cardiac disease should start before pregnancy occurs; they should be managed by interdisciplinary teams.

Materials and methods: In The Institute of Cardiovascular Diseases "Prof. Dr. George IM Georgescu", Iași, there were four cases of pregnant women with cardiac disease associated. Patient aged 16 years with 37 weeks pregnancy, single living fetus, tetralogy of Fallot, no cyanosis or hypoxic crises in history, which is the first pregnancy well tolerated. Patients aged 24 years and 39 weeks gestational age, surgically corrected transposition of the great arteries, moderate aortic stenosis, pulmonary stenosis, chronic heart failure NYHA class III, ventricular extrasystoles.

Patient aged 24 years, 38 weeks pregnancy, bicuspid aortic (stenosis moderate, moderate regurgitation), circular array of string. Patient aged 31 years, pregnancy 37 weeks, mechanical aortic valve replacement, NYHA class III chronic heart failure, incomplete uterine rupture.

Conclusion: In all four cases the pregnancy was terminated by cesarean section with further favorable development in specialized treatment and supervision.

Keywords: pregnancy, cardiac insufficiency, tetralogy of Fallot, transposition of the great arteries, bicuspid aortic valve

20. USING OF NEGATIVE PRESSURE IN THE TREATMENT OF PURULENT WOUNDS WITH CLOSE NON-STANDARD EQUIPMENT VACUUM ASSISTED (VAC)

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Introduction: VAC therapy is widely used in wound management. Standard equipments cost is a big impediment for its use.

Purpose and Objectives: To demonstrate the effectiveness of negative pressure assisted in purulent assisted wound treatment using non-standard Equipment VAC.

Materials and Methods: This paper presents a retrospective analysis of 12 cases of purulent wounds recorded in last year at Surgery Clinic No.1 "Nicolae Anestiadi" treated by negative pressure assisted using non-standard equipment of easily available materials to any surgeon and most importantly at an allowable price (50\$ USA vs 10500 €). This method consists of applying polyurethane foam sponge in the wound, and then the wound is covered with 3M IobanTM antimicrobial adhesive film. The wound tightly closed, is connected to a container vacuum manifold and to a negative pressure generator through silicone tubing. The sponges sterilizing is performed in autoclave in a standard way. Negative pressure was maintained at 85 mmHg continuously. Non-standard system VAC has been installed on the wounds debrided preventive with application on 24 hours of conventional dressing to avoid bleeding. The exchange of sponges was made at intervals first 24 - 36 hours followed by 48-72 hours. Efficiency of negative pressure assisted with non-standard equipment was demonstrated by the amount of germs from wound, cytological smears on the wound walls, retraction of the wound edges, cover time of the wound with granulation.

Results: The quantity of bacteria in the wound decreased significantly after day 5-6 of vacuum aspiration, up to 10^2 - 10^3 microorganisms. Inflammatory - regenerative type of cytological smears from the wound was present starting with the 4th day. Retraction of wound edges up to 0.5 - 1 cm on entire perimeter of the wound was observed after 72 ore. Granulation tissue missing from the beginning in wounds, after 2 courses of 48 hours each, covered the wound surface at a rate of 45-50 %, and after 6 days practically all wound was covered with live granulations, plethoric.

Conclusions: The final results of this study are encouraging. We, in no way, don't claim that non-standard Equipment VAC is better or worse than VAC® system, but we can safely state that it works well, is inexpensive and effective technique in the management of purulent wounds and we recommend its use in situations where standard equipment is not accessible.

Keywords: VAC, purulent wound

21. TERTIARY LUES COMPLICATED WITH AORTITA LUETICA AND CORONARITA LUETICA

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Introduction: Syphilis is a sexually transmitted infection caused by the bacterium *Treponema pallidum* subspecies *pallidum* spirocheta. Tertiary syphilis is the only one of the three forms of syphilis, which can cause cardiovascular complications (aortita luetica, coronarita luetica-angina). It occurs in approximately 3-15 years after the initial infection and may be presented in three different forms: gomatos (15%), syphilis, neurosyphilis tardy (6.5%) and cardiovascular syphilis (10%). The detection of the disease is made, usually by a serological test (SYPHILIS TPHA-VDRL), but the bacteria can be seen under a microscope. Without treatment, one third of infected people arrive at the tertiary stage. At this stage the disease is not infectious.

Materials and methods: We present a patient of 39 years with acute myocardial infarction in August 2004, complicated in evolution with early postinfarct angina, is admitted in September 2004 in the Centre of Cardiology Iasi, at coronarography were found the following faults: 95% stenosis of left main. occlusion ACD and aortic insufficiency major. During preoperative evaluation, the patient is diagnosed with Lues tertiary complicated with aortita and coronarita luetica, that's why surgery was temporized for treatment. Currently admitted to surgery. Imaging tests (echocardiography, CT thoracic, Rx-scan) and invasive (cardiac catheterization, coronarography) have revealed the cardiovascular injuries inflicted by the tertiary lues. Surgical procedure consisted in a by-pass aorto-coronary artery with reversed VSI on the ACD, resuspend the commissure of CNC and CCD and cognitive enlargement on the left main and ascending aorta with PVA (autologous venous patch). At the same time of surgical treatment the patient received Penicillin G 3 mil. IU x 2/day for 14 days for Lues tertiary.

Results. During the postoperative evolution was favorable, with the healing of surgical wounds completely and disappear the symptomatology with chest pain. Clinical assessment 1 month postoperatively showed a very good evolution, the patient was asymptomatic. On the 26.08.2013 patient returns to a routine check after a period of 9 years, this being asymptomatic.

Conclusions. In the case of tertiary lues complicated with aortita and coronarita luetica and associated with angina, the conduit therapeutic is different because surgery should be temporized for specific treatment for lues. After it was done the therapy with antibiotics, you can then intervene surgically in order to solve complications of myocardial and lues.

Keywords: tertiary lues, aortita luetica, coronarita luetica, *Treponema pallidum*, angina

22. ABDOMINAL AORTIC ANEURYSM, TREATMENT OPTIONS AND RESULTS

Tabac Radu

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Introduction: The Abdominal Aortic Aneurysm (AAA) represents the 12 cause of mortality in elderly subjects in USA. It is defined as an aortic dilation more than 3 cm in anterior-posterior or transversal cross-section, that exceeds the limit of 2 standard deviations. The natural evolution of the AAA lead to the rupture, nonetheless, the surgical risk of the procedure can be accepted in the exceeding 5.0-5.5 diameter AAA. Generally, 2 options of surgery can be regarded-Open and Endovascular Aneurysm Repair.

Purpose and Objectives: Was to make a meta-analysis focused on the methods from different published studies, contrasting the aneurysm repair results in mid and long term.

Material and methods: The study is based on literature review, expressing the outcomes of multicenter randomized clinical trials. There were considered also the screening/diagnostics features, the 30 days mortality and the long term follow up depending on surgical treatment option.

Results: The average AAA grow rate is 0.2-0.3 cm/year for an AAA diameter between 3 and 5 cm. Small aneurysms are symptomless, clinical signs can install to a large diameter, caused by compression, erosion, thrombolytic and the more significant- ruptured AAA. The death rate in an acute rupture varies between 62-94%, depending on the individual risk factors and the situs of rupture. The death rate in scheduled endovascular treatment is under 2%, whereas in open version can arise to 6-7%. The long follow-up shows similar results for the both methods.

Conclusions: The screening of risk group reduces the mortality by AAA. The ultrasound monitoring is recommended for a diameter between 3.0 and 5.0 cm, and an interventional treatment is indicated for the aneurysms greater than 50 mm. The application of endovascular technology has no benefit in long-term monitoring.

Keywords: EVAR, abdominal aortic aneurysm, endoleak

23. MARFAN SYNDROME COMPLICATED WITH THORACIC AORTA DISSECTION – A FAMILY CASE PRESENTATION

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Introduction: Marfan syndrome (MFS) is the most common inherited disorder of connective tissue affecting multiple organs: skeletal, ocular, and cardiovascular systems. The most life-threatening and life-shortening complication is aortic dissection. Without surgery, life expectancy of MFS patients is reduced to approximately 32 years.

Purpose and Objectives: The purpose of this presentation is to reveal the necessity of the early operative treatment in patients diagnosed with Marfan syndrome and the importance of screening tests in this group.

Materials and methods: The report is based on the analyses of the medical history of three patients, first degree relatives, diagnosed with Marfan syndrome who were admitted and operated in the department of cardiovascular surgery for the aortic dissection. The diagnosis was based on the echographic, angiographic and computer tomography data.

Results: All three patients were discharged in a good physical condition with the proper cardiac function and anticoagulation drugs. The follow up of the patients didn't reveal any further complications.

Conclusion: The screening of patients with Marfan syndrome for the aortic aneurysm is a useful and necessary instrument in the prevention of acute aortic dissection. The choice of the surgical procedure is based on the identification of type of the dissection, its extension and the preference of the surgeon.

Keywords: Marfan syndrome, aortic dissection

24. VASCULAR ACCESS FOR HEMODIALYSIS IN DIFFICULT CONDITION – CASE PRESENTATION

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Introduction: Hemodialysis in the end-stage chronic kidney disease requires a permanent access to the patient's circulatory system, and the suitable amount of blood flow is important for the efficiency of dialysis. These conditions are better satisfied by the arterio-venous native fistulae, synthetic shunt between artery and vein or a direct central venous cannulation. Central vein thrombosis and stenosis is one of the complications that make classical hemodialysis access unusable.

Purpose and Objectives: Presentation of an alternative solution for vascular system access, which will avoid stenotic /obstructed segments of the superior and inferior caval system.

Materials and Methods: The presentation is based on the analysis of the medical history of a patient with the superior vena cava syndrome, and severe stenosis of inferior vena cava developed after chronic hemodialysis with contraindications for peritoneal dialysis and kidney transplant, treated by installing a prosthetic shunt between right atrium and left axillary artery, and evaluation of similar cases found on PUBMED database.

Results: The patient was discharged from the department in good physical condition, with stable hemodynamic parameters; no signs of cardiac dysfunction were noticed on echocardiography.

Conclusions: In patients with severe limitation of blood flow in the superior and inferior cava system the creation of a shunt between an artery and right atrium is an effective solution for hemodialysis access. Given the small number of cases reported in the literature, the results of this procedure still have to be studied.

Keywords: Vascular access, hemodialysis, rightatrium

25. POSTCHOLECYSTECTOMIC SYNDROME. AN INTERVENTIONAL ENDOSCOPY, ADVANTAGES IN THE TREATMENT OF THE RESIDUAL CHOLEDOCHOLITHIASIS

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Introduction: Over the last decades the morbidity of choledocholithiasis increases therefore also increases the number of surgical interventions such as cholecystectomy and the interventions on the biliary tract, mostly connected with a choledocholithiasis. A number of recurrent stones in the biliary tract increases, which stimulate the development of medicine and further improvement of miniinvasive interventions to avoid those negative effects, which are caused by open methods.

Purpose and Objectives: To improve the results of treatment for the residual choledocholithiasis and to compare miniinvasive and open methods of surgery.

Materials and methods: At the hospital 204 patients with the obstructive jaundice non-neoplastic etiology have been treated. We have taken and analyzed 60 cases of PCES, including men, which were 30 (50%), and women, which also were 30 (50%). Interventional endoscopy was made for 30 (50%) patients (the study group); 30 (50%) patients were subjected to open methods (the control group). Patients in the study group were treated with the endoscopic retrograde cholangiopancreatography (ERCP), which includes endoscopic papillosphincterotomy (EPST), litoextraction (LE), papillosphincteroplasty (PSP), endoscopic revision and sanitation+balloon dilatation. To the patients in the control group was made an open cholecystectomy (CE) with choledochoduodenoanastomosis (CDA), CDA and reconstructive surgery: a transformation of CDA to choledochojejunoanastomosis (CJA). All patients had general medical examination, ultrasound of the abdomen, computed tomography. Endoscopic interventions were carried out with the FUJINONED - 250XT5 apparatus, papilotom «Olympus» and «Wilson Cook», Dormia basket, mechanical Lithotripters «Olympus», «Söring» machine was used for the tom, the cutting and coagulation mode.

Results: In the study group there were 2 cases of postoperative complications and in the control – 8 cases, which in the percentage for the study group is 6.66 %, and for the control - 30%. While conducting this analysis was highlighted the following symptoms: bleeding, pancreatitis, and cholangitis. In the study group were recorded one case of bleeding (3.33 %) and cholangitis (3.33 %). For the comparison, in the control group were recorded 3 bleeding (10.0 %), 4 pancreatitis (13.33 %) and 2 cholangitis (6.67 %). In the study group hospital patients stayed for the 3 ± 1 bed-day, in the control for the 13 ± 2 bed-days. Duration of endoscopic surgery on average lasts 27 ± 15 min., and the open surgery lasts 90 ± 15 min. There was no lethal outcome in both study and control groups.

Conclusions: Miniinvasive interventions have following advantages over the open surgical intervention: (1) Much shorter operation duration and less traumatism. (2) Reduced the number of complications in the early postoperative period. (3) Reduced the length of patient staying in the hospital.

Keywords: Postcholecystectomic syndrome, an interventional endoscopy, endoscopic retrograde cholangiopancreatography

26. RIGHT VALSALVA SINUS ANEURYSM RUPTURED INTO THE RIGHT CAVITIES

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Purpose and Objectives: VSA is a rare heart disease (1/2000 cases), discovered fortuitously, if unbroken aneurysms or with symptoms triggered by factors such as exercise, trauma, catheterization, folded on a preexisting condition, for example endocarditis, as happen in the ruptured cases.

Material and methods: We reported 2 cases with VSA complicated by rupture into the right cavities and severe heart failure. Case 1: Male patient, 55 years, with minimal effort dyspnea, dyspnea with orthopnea, fatigue and edema of the legs, symptoms began with two months before admission, suddenly after a physical effort. Case 2: Male patient, 42 years with dyspnea at rest, paroxysmal nocturnal dyspnea and extreme fatigue, myopericarditis and pleurisy history. Echocardiography was the one which diagnosed in both cases: In the first case, the right Valsalva sinus giant dilation with perforation 5-6 mm with RV communication in the RVOT and left right gradient of 68 mmHg, severe pulmonary hypertension confirmed by catheterization -PAP 95/47 / 58 mmHg, pulmonary circulation being charged 4 times. In the second case, it revealed the presence of an abscess of VSA ruptured into RA, with left-right shunt. Surgical correction was performed in both cases by aneurysm resection and suture of the defect, the first case adding mechanical prosthetic aortic caused by right coronary cusp prolapse, calcified and retracted.

Results: Postoperative evolution was favorable in both cases, the progressive withdrawal of inotropic support in the first case, the patients were discharged at 14 and 8 days after surgery.

Conclusions: Standard surgery mainly consists in aneurysm resection and suture defect processes, which could be easier in RA and RV involvement, but with a much more noisy symptoms in atrial segment.

Keywords: Valsalva, aneurysm

27. SURGICAL CURE OF INGUINAL HERNIAS BY THE LICHTENSTEIN PROCEDURE

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Introduction: The surgical treatment of the inguinal hernias is a current problem in terms of both frequency and the socio-economic complications involved. The actively employed people and the elderly are most frequently subjected to the surgical cures for inguinal hernias, which imposes the need to address the problem of reducing the period of hospital treatment, improve the quality of life, for the rapid socio-professional reintegration of the patient and the relapse prevention. The study aims at analyzing the results of the surgical treatment of inguinal hernias by the Lichtenstein procedure, highlighting the peculiarities of the surgical act and the advantages of using synthetic mesh during the treatment.

Materials and methods: The study is based on the analysis of the treatment of 468 patients with a diagnosis of inguinal hernia treated in the Surgery clinic of the Chisinau NCSUMP in 2011-2012. The study group was divided as following, women - 38 (8,12%), while men - 430 (91,88%) ($p < 0,05$). The average age was $53,5 \pm 0,79$ years. There were 271 (57,9%) patients of the working age (60 years) and 197 over 60 years - 197 (42,1%). The Lichtenstein procedure was chosen for 321 (68,6%) of the total amount of the 454 operated cases. The repair was performed with the Pro-Meshand Biosintex meshes, having the 7x15 cm size, while the sutures - with a 2.0 polypropylene thread.

Results: The postoperative period was favourable for most patients. By Clavien, postoperative complications occurred only in 2 patients, as determined by the simultaneous pathologies. The local complications (abscess, seroma, haematoma) were not reported in any patient. The

average postoperative duration was $5,34 \pm 0,06$ days, with the per prima regeneration of the postoperative wound in 100% cases. The patient's follow-up period was up to 12 months.

Conclusions: The Lichtenstein procedure is the method of choice in the surgical cure of inguinal hernia due to the simplicity, efficiency, minimal postoperative pain and rapid socio-economic reintegration of the patients. The cancellation of the blood pressure in the tissues allows to minimize the risk of relapse, providing greater comfort for the patient.

Keywords: inguinal hernia, Lichtenstein hernioplasty, polypropylene mesh, relapse

28. NON-SAPHENOUS SUPERFICIAL VENOUS REFLUX IN PATIENTS WITH VARICOSE VEINS

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Introduction: Occurrence of pathological venous reflux in the superficial veins of lower limbs is considered to be the pathogenetic factor in the development of varicose veins. In the overwhelming majority of cases venous reflux is diagnosed at the level of the saphenous system: either in the main trunk (axial reflux) or in the tributaries assigned to the greater or lesser saphenous veins (non-axial reflux). In contrast, non-saphenous venous reflux (NSVR) is deemed to be the pathological reflux in superficial veins which are not attributable to the saphenous systems. Till date there is lack of information on NSVR even in specialized medical literature, this kind of venous hemodynamic disorders being often underdiagnosed in daily clinical practice. This study was designed to determine the prevalence and distribution of NSVR in patients with varicose veins depending on age, gender and C class of Clinical-Etiology-Anatomy-Pathophysiology (CEAP) classification.

Materials and Methods: Information on 463 patients (546 limbs) consulted with varicose veins during a two years period was analyzed in a retrospective study. Anthropometric data were recorded, while involved limbs were distributed according to CEAP classification. Affected extremities were examined with duplex ultrasound scanning and conventionally split up into two groups based on the source of venous reflux – group I (saphenous reflux) and group II (NSVR). Clinical and imaging data were subsequently assessed.

Results: NSVR was diagnosed in 42 (7.69%) limbs of 38 patients. We identified the sources of NSVR as following: perforator veins of lateral, posterior and medial thigh (n=9, 21.4%); pelvic veins (n=17, 40.47%) including vulvar veins and veins from the gluteal area; branch from common femoral vein (n=3, 7.14%); veins of popliteal fossa (n=12, 28.57%); knee tributaries (n=1, 2.38%). There was noted more frequent detection of NSVR in female patients – 31/38 (81.57%), with a female/male ratio of 4.42/1 in group II versus 1.85/1 – in group I. The average age of patients from group I was 52.78 years (ranging from 18 to 90 yrs) versus 37.43 years (ranging from 18 till 48 yrs) – registered in pts from second group. The C2-3 (CEAP)/C4-6 (CEAP) ratio was 1.69/1 – in group I versus 7.4/1 – in the group II.

Conclusion: Patients with varicose veins present various patterns of venous reflux. NSVR had a prevalence of 7.69% in our study, being revealed most common in young female patients, with low till moderate clinical severity (class C2-3 according to CEAP classification) of chronic venous disease. Meticulous duplex ultrasound examination of patients with varicose veins is crucial in order to establish the precise origin of the pathological venous reflux.

Keywords: non-saphenous venous reflux, varicose veins, duplex ultrasound

29. JUNCTIONAL SAPHENOUS VEIN ANEURYSMS: CLINICAL IMPLICATIONS

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Introduction: The aneurysms of superficial veins of the lower limbs are traditionally considered behaving trivial clinical significance. However, "junctional" saphenous aneurysms (JSA) namely hold the utmost importance for the reason that they carry higher risk of potentially evolutive complications and may involve a comprehensive surgical approach. Furthermore, JSA are not clearly categorized, and no accurate curative strategy in these cases is stipulated. The current study aims to assess the clinical and duplex ultrasound data, as well as to analyze their influence on surgical tactics in patients with JSA.

Materials and Methods: 14 patients with JSA were enrolled into the study during a 6 year period. The mean age of pts was 54.07 years, ranging from 30 to 80 years; the male/female ratio – 9/5. JSA was defined, based on duplex ultrasonography data, as local dilatation of the saphenous trunk at junction level (more than half compared to the diameter of immediately distal venous segment). In 10 patients JSA were localized at the level of sapheno-femoral junction (in one case both lower limbs were affected), and in other four – at the sapheno-popliteal junction. All pts were hospitalized for symptomatic varicose veins. Both (right/left) legs were affected in equal measure (7/8). The following distribution according to C class of CEAP classification was registered: C2=3(20%); C3=5(33.3%); C4=4(26.6%); and C6=3(20%). All pts underwent surgical intervention for JSA and concomitant varicose veins.

Results: Only 2 JSA were symptomatic and the same number was identifiable by physical exam. Also 2 JSA were filled with thrombi according to duplex ultrasound. In terms of morphological structure 10 fusiform and 5 sacciform JSA were evaluated. The average diameter of JSA was 15.95 ± 1.15 mm (ranging from 10.2 mm to 23 mm). High ligation of saphenous vein in conjunction with open resection of JSA was done in 10 cases. Tangential aneurysmectomy followed by lateral venorrhaphy of common femoral (n=4)/popliteal (n=1) vein was considered in 5 pts. There was a significant difference between the mean values of the diameter of JSA in the two conventional groups – 13.82 ± 0.96 mm vs. 20.2 ± 1.71 mm, respectively ($p < 0.01$). Meanwhile, tangential aneurysmectomy was necessary in cases involving terminal valve, fusiform type of JSA and in the absence of "neck" between aneurysmal sac and the common femoral/popliteal vein.

Conclusion: Large diameter, involving the saphenous' terminal valve and the absence of a "proximal neck" appear to be the predicting criteria for the need in femoral/popliteal venoplasty during surgical management of JSA.

Keywords: Junctional saphenous vein aneurysm, varicose veins

30. CLINICAL PRESENTATION AND SURGICAL TREATMENT OF SMALL BOWEL GASTROINTESTINAL STROMAL TUMORS: RETROSPECTIVE ANALYSIS OF 13 CASES

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Introduction: Small bowel tumors are rare malignancies that account for 1-5% of all gastrointestinal tumors. Despite the progress in recent years in the treatment of small bowel tumors, their diagnosis is difficult to date because of nonspecific symptoms. To analyze the clinicopathologic characteristics, diagnostic options and complex treatment of 13 cases of small bowel gastrointestinal stromal tumors (GIST).

Materials and Methods: 13 consecutive patients with small bowel GISTs, 5 males (38.5%) and 8 females (61.5%), male: female ratio 1:1.6, median age of 55.1 ± 3.3 (95% CI:47.90-62.25)

years (28-71 years), who underwent surgery from 2008 to 2014, were included in this study. The clinical records of the patients were analyzed retrospectively.

Results: Abdominal pain (11 cases, 84.6%) was the most common complaint. Abdominal CT was routinely performed on 9 (69.2%) patients. The preoperative diagnosis was established in 7 (53.8%) cases by abdominal CT. In 5 cases the tumors manifested clinically with complications: hemorrhage – 2 (15.4%) patients, obstruction – 2 (15.4%) patients and perforation – 1 (7.7%) patient. In 3 (23.1%) patients the tumor was localized in the duodenum, in 8 (61.5%) – in the jejunum and in 2 (15.4%) – in the ileum. All patients received surgery: 2 – cephalic pancreatoduodenectomy, 9 – small bowel resection, 1 – duodenal resection and 1 – wedge resection. The distribution of stages of the disease was as follows: IA=23.1% (n=3), II=7.7% (n=1), IIIA=30.7% (n=4), IIIB=23.1% (n=3) and IV=15.4% (n=2). The mean number of tumors was 2.5 ± 0.7 (from 1 to 9). The mean maximum diameter of the tumors was 9.5 ± 1.3 (from 3.7 to 20) cm. All 13 patients (100%) showed positivity for *c-KIT*(CD117). The overall median number of mitoses/50HPF was 8.8 ± 1.2 (95% CI:6.15-11.54). The median number of mitoses/50HPF in patients with high risk of recurrence was 11.1 ± 1.1 (95% CI:8.60-13.62) (from 7 to 18) (n=9) and 3.7 ± 0.5 (95% CI:2.227- 5.273) (from 3 to 5) (n=4) in patients with low risk of recurrence. A total of 9 (69.2%) patients received adjuvant treatment with imatinib mesylate 400mg/day.

Conclusion: Clinical manifestations of small bowel GISTs are non-specific and preoperative diagnosis is difficult. Surgery is the only curative option in the complex treatment of this disease.

Keywords: gastrointestinal stromal tumor, small bowel, clinicopathologic characteristics, resection

31. MORPHOLOGICAL EVALUATION OF THE DIFFERENT METHODS USED FOR PROTECTION OF COLONIC ANASTOMOSIS

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Introduction: Despite the performances of modern medicine, especially of colorectal surgery, anastomotic leakage remains one of the most dangerous postoperative complications, without significant trend of decreasing. Morbidity and mortality increase considerably after the development of an anastomotic leakage. Anastomotic leakage presents an important problem of public health with major socio-economic impact and can be considered one of the quality indicators of specialized surgical centers' activity. There are multiple studies running in order to create and assess the efficacy of colonic anastomosis local protection methods. Aim of study was morphological evaluation of the methods used for local protection of anastomotic zone and their influence on the anastomosis healing.

Materials and methods: Sixty three rats were divided in three groups: colonic anastomosis was performed and topical latex tissue adhesive was applied in the group I (n=21); colonic anastomosis with local application of collagen patch in the group II; colonic anastomosis without local protection in the group III.

Results: Anastomotic leakage was not determined in the group I vs the group III, where were detected 5 cases of anastomotic leakage. According to the present study's data in the group I was determined early diminution exudativ-detersiv process' activity vs groups II and III ($p < 0.01$). Latex tissue adhesive has positive influence on the processes of neoangiogenesis and fibrilogenesis in the anastomotic zone on the 14th POD vs the group II and III ($p < 0.05$). According to ours data latex tissue adhesive has considerable compatibility with colonic tissue that represents the absence of giant like „foreign bodies” symplasts and insignificant immunologic reaction of large bowel. Aggressive bacterial colonization in this group has contributed for appearance of anastomotic leakage, formation of abscesses and granulomatous processes like „foreign bodies”. Mentioned processes considerable have complicated synchronous evolution of neoangiogenesis and fibrilogenesis in the anastomotic zone,

resulted in decreasing of the primary healing, appearance of anastomotic deformations and expression of the adhesion process vs anastomosis from the groups I and III.

Conclusion: Using of latex tissue adhesive for local protection of colonic anastomosis improves anastomotic healing, processes of neoangiogenesis and fibrilogenesis. Using of collagen patch for local protection of colonic anastomosis doesn't have any advantages and provokes delaying of regenerative processes and persisting of an inflammatory process.

Keywords: anastomotic leakage, collagen patch, latex tissue adhesive

32. TRAUMA OF THE PANCREAS: PROBLEMS IN DIAGNOSIS AND OPTIMAL MANAGEMENT

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Introduction: Leading place among abdominal trauma is represented by the damage of hepatopancreatoduodenale area, including very serious consequences as pancreatic trauma, manifested by difficulty in diagnosis and high lethality, which is 2-3% in isolated trauma, and 50-60% - the associated trauma and posttraumatic complications rate is up to 75%.

Purpose and Objectives: Analysis of the results of diagnosis and treatment of patients with traumatic injuries of the pancreas depending on the degree of injury by optimizing the algorithm of diagnosis, treatment and prevention of complications.

Materials and methods: During the period 2000-2010 in surgery clinic no. 1 "Nicolae Anestiadi" were interned 60 patients with traumatic lesions of the pancreas. Most of the patients suffered closed abdominal trauma 39 (65%) and with open trauma were 21 (35%). There was a major of cases of associated lesions and multiple constituting (35% and 22%). Major interest presented diagnosis of complications caused by traumatic lesions of the pancreas, and especially traumatic acute pancreatitis (PTAP) and its evolutionary forms, which is the most common complication in this type of injury. As the major methods in the diagnosis of traumatic lesions of the pancreas were ultrasound examination 41 (68%), laparocentesis 19 (48.7%) and laparoscopy 16 (26.7%), being applied consecutively and in dependency of the status of each case. Drug treatment was applied in 8 patients with isolated closed abdominal trauma hospitalized with clinical signs of PTAP, with no signs of intra-abdominal haemorrhage or peritonitis and patients operated with or without signs of PTAP in order to its prevention. Surgery required 52 (86.7%) patients, of them 31 (59.6%) with closed abdominal trauma and 21 (40.4%) with open lesions. According to the severity of injuries patients were distributed: gr. I-17 (28.3%), gr.II-34 (56.7%), third degree, 4 (6.7%), gr. IV-4 (6.7%), gr.V-1 (1.6%). Basic principles of surgical treatment included hemostasis with organ preservation, closed or open drainage of omental bursa, external drainage of injured duct of Wirsung, biliary decompression.

Results: The postoperative complications were 41 (68.3 %) patients, of which: PTAP 34 (82.9%), suppurative complications 7 (17.1%). Lethality was 11 (18.33%).

Conclusions: The diagnosis of traumatic lesions of the pancreas is determined by the anatomical features of pancreatic-duodenal area, preoperative diagnosis is possible only on the basis of a standardized complex of clinical and laboratory investigations. Treatment of traumatic lesions of the pancreas with organ preservation, most necessary part of the operation being conducted bursoomentostomia.

Keywords: Pancreas, trauma, acute posttraumatic pancreatitis

33. BENIGN TUMORS OF THE LIVER: DIAGNOSIS AND TREATMENT MANAGEMENT

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Introduction: Many benign liver lesions are an incidental finding in patients with no specific symptoms. However, in patients who are evaluated because of upper abdominal complaints, another difficulty is to make sure that the benign liver tumor and not the associated condition is indeed responsible for the symptoms. There is a bad correlation between a liver tumor and complaints and any benign tumor <5 cm is unlikely to be symptomatic. To perform a retrospective analysis of clinical material to develop optimal diagnostic and therapeutic tactics for patients with benign liver tumors and assessing postoperative outcomes.

Materials and methods: The study was conducted on a group of 39 patients with benign liver tumors who were hospitalized in Republican Clinical Hospital, Department of Hepato-biliary-pancreatic Surgery. The patients have been examined for diagnosis and surgical treatment.

Results: Benign liver tumors most commonly affect women to men (ratio of 3:1), which is possible due to the use of oral contraceptives, most lesions being detected between 41-50 and 61-70 years old. In the series of 39 patients, 30 were hemangiomas, 6 adenomas and 3 focal nodular hyperplasia. The complaints were grouped in 3 syndromes: the dolor syndrome (61%), dyspeptic syndrome (26%) and asthenia (13%). This feature reflects benign liver tumors to appear asymptomatic. All patients were investigated at US, CT or MRI, CT being the most specific method. The most common location is in V-VII segments, corresponding to the right hepatic lobe. Predominate large tumors (> 10 cm). Changes in peripheral blood like anemia, thrombocytopenia, accelerated ESR are minimal. Tumor markers (CA 19-9, CEA, AFP) were elevated in only 5(13%) of 39 patients. Surgical treatment: 28 enucleations, 8 atypical resections, 3 anatomical resections. Prevalence of enucleation directly reflects predominance of hemangiomas. Postoperative complications were minimal with zero mortality.

Conclusion: Benign tumors usually are asymptomatic, symptoms are more likely with large lesions, but a well-established diagnosis tactic includes US, CT and MRI. The treatment management is individual and depends on location, size of tumors and patients complaints. When surgery is not indicated, patients should be periodically evaluated by US and CT.

Keywords: benign liver tumor, hemangioma, hepatic resection

34. CANCER OF THE COLON. CONTEMPORARY METHODS OF DIAGNOSIS AND TREATMENT

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Introduction: Colon cancer is a leading cause of morbidity and mortality in the world with a significant impact on the medical, social and economic field. In developed countries, affecting 1 in 20 people, and in Europe every second death from cancer is the colon cancer. In Moldova, in 2001 the incidence of colon cancer was 18.8% (primary patients 816) mortality being 16% (300 patients).

Purpose and Objectives: Studying and determining optimal methods of diagnosis and treatment of patients in the examined group. Identify the relationship of patient age, sex, origin and geographical location.

Materials and Methods: In the research were examined 40 patients with clinical diagnosis: colon cancer. Clinical and statistical documentation was based on clinical observation data sheets, protocols operative imaging materials and histopathological results in the archive Republican Clinical Hospital.

Results: In the year 2010, the total number of patients operated on in the Department colorectal of the Republican Clinical Hospital was 850, of which 40 patients with colon cancer. The

study included 21 men (52,5%) and 19 women (47,5%). Decades of age V, VI and VII were most affected by colon cancer representing 95% of cases, with a maximum peak incidence in the fifth decade of 57.5%. Less affected were patients younger than 50 years accounted for only 5% of cases. Rating according to location: sigmoid colon (42,5%), rectum (30%), descending colon (15%), ascending colon (10%) and transverse colon (2,5%). According to geographical distribution most affected area was the centre of the country – 52%. In accordance with environmental distribution predominant are patients in rural area – 65%. According to histological form is predominantly adenocarcinoma – 97,5%. 97.5% were diagnosed in stage IV of colon cancer and only 2.5% in stage III. Depending on addressing, 77,5% of total addressed urgently, and 22.5% - planned. Intestinal occlusion is the most common complication of colon cancer is an indication for emergency surgery and requires urgent addressing to specialized medical institutions.

Conclusion: From the study, the most frequently affected with colon cancer are patients aged 51-60 years with a maximum peak incidence of 57.5%. Intestinal occlusion is the most frequent complication of cancer of the colon and it is an indication for surgical treatment. 77.5% of the total were hospitalized urgently, and within 48 hours were operated 58%.

Keywords: colon, cancer, adenocarcinoma

35. DOPPLER ULTRASOUND EVALUATION OF PATIENTS WITH SURGICAL ASSISTED PORTAL SPLENOPATHY

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Introduction: The liver cirrhosis is a particularly complex problem and presents interest for many medical specialties, representing a major public health problem. Clinical and Doppler monitoring are required in this situation to achieve optimal results. The portal hypertension surgery is a serious aggression for the liver patient, frequently on the edge of his own biological resources. Assessment of Doppler ultrasound utility in evaluation of patients with portal splenopathy and quantification of particular parenchymal and vascular modifications.

Materials and methods: 50 cirrhotic patients (31 men-60 % and 29 women-40 %), were enrolled in the study, the mean age is 34.8 years (between 23-54 years), monitored at Surgery Clinic of SCR. We studied the results of abdominal ultrasonography and eco-Doppler, following the particularities of portal hemodynamic changes and postoperative complications. Different surgical methods of treatment were applied: Hassab's decongestion + splenectomy (48 patients-96%, 9 of this were approached by laparoscopic surgery), distal splenorenal shunt procedure (DSRS) (1 patient-2%), singular splenectomy (1 patient-2%).

Results: The clinical manifestations were dominated by splenomegaly, weakness, ascites, bleedings and collateral circulation. Severe hypersplenism was confirmed in 32 patients-64% cases, 17 of them translated by pancytopenia, and 4 cases by thrombocytopenia. Ultrasound examination confirmed the diagnosis of chronic hepatopathy in all examined cases. The most common pathological ultrasound aspects was splenomegaly (47 cases - 94 %), dilatation of portal vein, increased portal and splenic vein diameter in 45 patients (90 %), increased echogenicity of the hepatic parenchyma in 44 cases (88%). Multiple vascular malformations of the spleen have been reported in this study: 18 cases (36 %) of perisplenic varices, 16 patients (32%) we noted the presence of peri-gastric and peri-esophageal collateral veins, 6 cases - hepatofugal flow, splenic infarction - 3 cases, 2 cases of portal vein thrombosis. We have determined accessory spleens in 2 cases. The results of upper endoscopy: 12 patients (24%) with 2nd and 3rd degree esophageal varices and 36 patients (72%) with 3rd degree portal hypertensive gastropathy. The postoperative Echo-Doppler monitoring detected portal vein thrombosis in 2 cases, abscess in the area of splenic lodge - 1 case, 3 cases of ascites.

Conclusion: The perioperative ultrasound evaluation in the patients with liver disease has a major importance for establishment of the positive and differential diagnosis of portal splenopathy.

Key words: liver cirrhosis, esophageal varices, Doppler

36. ACUTE ABDOMEN IN PATIENTS WITH CIRRHOSIS –CASE PRESENTATION

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Introduction: Association between chronic liver disease and spontaneous bacterial peritonitis has been known for a long time. The presence of such an case raise important problems for the differential diagnosis and treatment. We bring this subject into the actuality through several presentations of clinical cases.

Presentation of cases

A. Evaluation of case Nr.1. Spontaneous bacterial peritonitis.

Patient P.M. aged 31 years with the liver suffering known, has been shown to the doctor with abdominal distension and abdominal pain, symptoms were gradually installed 7 days ago. Hemodynamically unstable, respiratory = 24 resp./min. Distended abdomen presenting vicious scar after celiotomy surgery (splenectomy in antecedent). Paraclinic exams: USG: ascites, portal vein thrombosis suspected (?). Laboratory: post-splenectomy thrombocytosis, leukocytosis, hyperbilirubinemia. Superior endoscopy: esophageal varices gr.II. Paracentesis with ascites fluid examination: spontaneous bacterial peritonitis. Is established syndromal treatment, low molecular weight heparin (therapeutic doses), pentoxifylline, diuretics, - clinical improvement. Discharged in relatively good condition, included in the waiting list for liver transplantation.

B. Evaluation of case Nr.2. Secondary bacterial peritonitis: acute appendicitis.

Patient A.M. the aged 47 years, older cirrhotic, generalized malaise, jaundice, sleepy, t^o-37, 5, shiver. Abdomen enlarged by ascites fluid, dolor on abdominal palpation mostly right wing, swelling of the abdominal wall, the sign Blumberg suspect. Was performed diagnostic paracentesis: cytology characteristic for secondary bacterial peritonitis. Laparoscopy in the differential diagnosis of ascites-secondary peritonitis attest micronodular cirrhosis, ascites fluid with fibrin widespread diffuse, acute appendicitis. Was practiced: laparotomy, appendectomy, betadine saline lavage, drainage. Postoperative train evolution, discharged cured surgically.

C. Evaluation of case Nr.3. Secondary bacterial peritonitis. Hepatogen perforated gastric ulcer.

CV patient, 43 years old, cirrhotic with multiple decompensations without ulcer history, is hospitalized in very serious condition. Temporo-spatially disoriented. Abdomen increased in volume, ascites, reponse umbilical hernia, caput medusa, peritoneal negative signs. Endoscopy performed 18 days prior to the pre-hospital attest esophageal varices gr.II, severe gastropathy. Abdominal ultrasound - liver hypoplasia, VP = 1.6 cm, ascites. Rx-abdominal on hollow - pneumoperitoneum absent. Paracentesis- opalescent ascitic liquid. Is established antibiotic therapy, diuretics, syndromal medication, metabolic correction. The surprise which reserve this case: through the nasogastric tube was evacuated about 9 liters of citric fluid similar to that from paracentesis, while noticing the decrease in volume of abdomen - clinical suspicion of perforated peptic ulcer? Parenchymal deterioration, CID - syndrome, hepatic coma, death. The autopsy found hepatogen antral ulcer perforated, ascites, peritonitis. The peculiarity of the case: diagnostic difficulty with important therapeutic and prognostic implications.

Conclusions:

1. The association of liver disease with ascites syndrome is a reality.
2. The ascites syndrome in a cirrhotic patient must be suspected as a secondary bacterial peritonitis.
3. The therapy endo-laparoscopic positively influence quality of life and prognosis.

Keywords: Peritonitis, ascites syndrome, cirrhosis

37. FIGHTING THE MULTI ORGAN FAILURE

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Introduction: Multiple organ failure is the commonest cause of death in the intensive care unit setting. There are numerous precipitating factors including sepsis, trauma and pancreatitis. The resulting tissue hypoxia, exaggerated inflammatory response and generation of free oxygen radicals leads to tissue damage and organ dysfunction. No definitive treatment exists despite considerable efforts to find a 'magic bullet'. Management still revolves around support of organ function and prevention of iatrogenic complications until recovery occurs. An increasing emphasis is being placed on prevention of organ dysfunction, including maintenance of tissue oxygenation, nutrition and infection control. Multiple organ failure (MOF) is the commonest cause of death in the intensive care unit (ICU). A clinical assessment of a high likelihood of irreversible organ failure, particularly when multiple organs are involved, is the usual factor prompting a decision to withdraw treatment or not to add further therapy. Sepsis is one precipitating factor for MOF; numerous other causes of tissue damage are well recognized, e.g. trauma, burns and pancreatitis. No definitive treatment exists and controversy surrounds many aspects of the management of MOF. Problems include (i) a shortage of major multi-center, controlled studies in a well-defined patient population (other than immunotherapy trials which are often of flawed design), (ii) an inclination to use unproved interventions, (iii) over-extrapolation of data from laboratory studies, (iv) an often uncritical acceptance of simplified, schematic representations of inflammatory mechanisms, (v) variable disease syndrome definitions and (vi) diagnostic imprecision. The above contribute to the current lack of hardened-fast rules regarding patient management; instead, there are a number of generally accepted guidelines which still provide considerable scope for treatment variability. Examples of current grey areas include selective gut decontamination, extracorporeal respiratory support and prophylaxis against stress-ulcer-related bleeding. There is also the widespread, though as yet unproven and unlicensed, use of nitric oxide inhalation in acute lung injury, and the quest for a single 'magic bullet' to ameliorate the generalized, exaggerated inflammatory response associated with severe sepsis. In the case of the strongly promoted concept of 'supranormalizing' hemodynamic parameters in the critically ill patient, whereby elevated values of cardiac output, oxygen delivery and oxygen consumption were striven for, it was several years before this approach was shown to be ineffective. Nevertheless, and despite the above caveats, there has been progress in several areas. A better, though still incomplete, insight is being gained into the pathophysiological mechanisms underlying the exaggerated inflammatory response that frequently underlies MOF. There is a greater appreciation of the need to prevent organ dysfunction by optimizing the circulation and avoidance or rapid correction of tissue hypoxia in high-risk patients. There is also recognition of the importance of standard definitions, for example sepsis, the systemic inflammatory response syndrome (SIRS), the multiple organ dysfunction syndrome (MODS), the acute respiratory distress syndrome (ARDS) and acute lung injury. There is also a recognized need to improve the description of organ dysfunction. In addition, general advances and the increasing availability of intensive care, superior 'whole body' organ support, appropriate infection control, nutrition and pressure area care, and avoidance of iatrogenic pulmonary barotrauma, have all contributed to improvements in outcome.

Objective: To determine whether translocation of bacteria or endotoxin occurred into the thoracic duct in patients with multiple organ failure (MOF) and to take active role in MOF.

Methods: 1. Meta-analysis of 156 patients from retrospective - preview data base of patients in MOF. 2. The thoracic duct was drained for 5 days in patients with MOF caused either by generalized fecal peritonitis (n = 4) or by an event without clinical and microbiologic evidence of infection (n = 4). Patients without MOF who were undergoing a transthoracic esophageal resection served as controls. In lymph and blood, concentrations of endotoxin, proinflammatory cytokines, and anti-inflammatory cytokines were measured.

Experimental data: Description - in heart of Mousses, was examined the function of heart (in vitro), in 3 state: 1. Normal without intervention. (Control group). 2. With lymph of MOF state. 3. With MOF state + thoracic duct ligation.

Conclusion: This meta-analysis study provides evidence that translocation (especially of endotoxin) occurs into the thoracic duct. These data do support the concept that the thoracic duct is a major route of bacterial translocation in patients with MOF

38. NEGATIVE PRESSURE THERAPY IN THE TREATMENT OF SUPPURATED EVENTRATED LAPAROTOMIC WOUND

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Introduction: The laparotomic suppurated eventrated wound is a postoperative complication caused by contamination, suppuration and necrosis of the abdominal wall anatomical layers (subcutaneous fat, ventral aponeurosis, peritoneum) with eventration of abdominal organs. The use of negative pressure therapy in the treatment of laparotomic suppurated eventrated wound is described worldwide in the specialty literature, but its efficiency depending on the etiology of the intraabdominal infection remains insufficiently studied.

Purpose and Objectives: Reporting the results of the treatment with negative pressure of the patients with laparotomic suppurated eventrated wounds.

Materials and Methods: From October 2012 until March 2014, negative pressure therapy was used in the treatment of laparotomic suppurated eventrated wounds in 22 patients with the mean age of 64.2 and sex ratio M:F being 15:7. The study included patients with laparotomic suppurated eventrated wounds due to diffuse peritonitis in the following nosologies: inguinal hernia with small bowel necrosis (1), postoperative ventral hernia (1), gastric adenocarcinoma with perforation (1), gangrenous cholecystic perforation (1), closed abdominal trauma with bowel (1) and small intestine injury (1), fistular Crohn's disease (1), gangrenous perforative appendicitis (3), colon ischemia and necrosis with perforation (2), nonspecific ulcerative colitis with intestinal obstruction (1), colon diverticulum perforation (2), benign tumor of the colon with mechanic obstruction (1), colon adenocarcinoma with mechanic obstruction (3), colon adenocarcinoma with perforation (3).

Results: The negative pressure therapy set at 75-105 mmHg was applied after necrectomy, with a mean duration of the sessions of 48-72 hours. The number of sessions was determined by the type of intraabdominal infection. Wound closure criteria were: the presence of mature granulation tissue, the type of inflammatory-regeneratory cytological imprints and the decrease of the amounts of wound microflora from 10^{6-7} to 10^{2-3} . The treatment was carried out in two stages: the first stage - negative pressure therapy with suturing of the ventral aponeurosis, the second stage - continuing negative pressure therapy with complete closure of the laparotomic wound. Definitive closure of the abdominal wall was possible in 19 patients. 3 patients died, the mortality rate constituting 13.6%.

Conclusions: The use of negative pressure therapy in the treatment of the laparotomic suppurated eventrated wounds allows to: eliminate the septic source, decrease the frequency of dressings changes- one at 48-72 hours with a fascial closure rate of 86.4%.

Keywords: negative pressure therapy, laparotomic suppurated eventrated wounds, fascial closure

39. HAEMOSTASIS FOR VARICEAL BLEEDING IN PATIENTS WITH LIVER CIRRHOSIS

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Introduction: Variceal bleeding is a severe complication of cirrhosis leading to significant morbidity and mortality. Ruptured esophageal varices cause approximately 70% of all upper

gastrointestinal hemorrhages in cirrhosis. Diagnostic and therapeutic developments have led to a significant improvement in the prognosis of this complication over the past two decades. Endoscopic treatment, mainly variceal band ligation or sclerotherapy, has proved to be effective in controlling acute variceal bleeding.

Material and methods: The study was performed within the National Scientific Practical Center of Emergency Medicine. Fifty seven consecutive alive patients admitted with variceal bleeding were included. There were 38 male and 19 female patients, mean age - 53.7 ± 12.6 (95% CI: 50.34-56.99) years. The patients were divided according to the Child Pugh score as follows: class A - 22 patients (38.6%), class B - 30 patients (52.6%), class C - 5 patients (8.8%). Haemostatic methods used were: Sengstaken Blakemore (SB) tube in 11 patients (19.3%); endoscopic rubber band ligation (EBL) in 23 patients (40.3%) and combined methods - SB probe + EBL in 11 pts (19.3%), Danis stent + EBL in 1pt (1.75%), sclerotherapy + SB probe + EBL in 1 pt (1.75%), SB probe + Danis stent + EBL in 1pt (1.75%); in nine patients only pharmacological methods of haemostasis were used.

Results: Several parameters were analyzed and compared between the groups Child Pugh A, B and C (using one way ANOVA with Bonferroni post test): length of stay, length of ICU stay, Algover shock index, number of installed rubber bands, volume of packed red blood cells and fresh frozen plasma transfusion, length of SB probe in situ and the MELD score. No statistically significant differences were found between the three groups, except the MELD score (A vs B, A vs C and B vs C; $P < 0.0001$).

Conclusion: Although our study didn't show any statistically significant difference of various parameters between the three groups, there is a general agreement that advancing through the Child classes from A to C the patients are more severely ill and have a poorer prognosis, fact proved by the highly significant difference of the MELD scores.

Keywords: cirrhosis, Child Pugh, varices, bleeding, hemostasis

40. LIVER TRANSPLANTATION

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Introduction: Liver transplant surgery is very difficult and hard to make. This surgical method allows to treat patients suffering from liver disease in advanced stages. Many scientists with continued history of liver transplantation, several surgical approaches have been proposed that liver transplantation be performed successfully and the patient's lifetime to be as high posttransplant. Developing research in immunosuppression has made disappear liver graft rejection thus increasing the life span of patients posttransplant.

Purpos end Objectives: Study of surgical techniques used in liver transplantation. Efficacy posttransplant. Study anatomical variants and biliary vessels main maintaining quality graft, surgical techniques to container, donor, back-table, graft implantation.

Materials and Methods: Gathering all the information related to the surgical and postoperative treatment. Research and publications carried out by Scientists in the field of liver transplantation.

Results: Total hepatectomy technique "piggyback". Hilar dissection should be performed as high as possible (especially blood and bile). Cystic duct is ligated and sectioned. High hilar dissection (High Hilarious Dissection, HHD). Using high hilar dissection enables us to perform venous anastomosis sector. Dissection of the bile duct. Donor operation: Skin incision. Full mobilization of the right hepatic lobe. Issuance of right hepatic lobe of the inferior vena cava. Preservation for future reinpantarea vein diameter > 5mm. Hepato - caval ligament transection . Cholecystectomy with cholangiography subsequent cystic duct catheterization. Intraoperative ultrasound. Selective clamping the artery and portal vein straight boundary demarcation of hemificatul hemificatului left. Parenchymal transection with electrocautery. Pedicolului final clipping and bile ducts in the portal as hemificatului law. Technical Back -Table: weighing graft harvested. Wisconsin perfusion solution. Grading scale blood , bile and venous existing anatomical variants. Right hepatic artery is cannulated and dilated. Reanastomozate the manner termino-terminal venous system with

diameter greater than 5 mm. Mason venous anastomosis a 3- 5mm. Implantation graft technique: end-to-end portal anastomosis. Reperfusion of a PVC 5 -9mm Hg, assess graft quality, complete hemostasis and bilistaza. Making Doppler ultrasound. Portosystemic shunts, splenic artery ligation, splenectomy. End-to-end anastomosis of the right hepatic artery. Bile duct reconstruction and prosthesis on stend transcoledocian externalized. Harvesting hemostasis and assessment of liver surface. One important thing ese posttransplant administration of immunosuppressants for graft rejection does not occur.

Conclusion: Knowledge anatomical variants of the arteries, veins and biliary enables us to intervene surgically prepared as well as possible and post surgical complicatiilr less. Knowledge of surgical techniques allow us to perform surgery and how quickly how much less damage to both the donor as well as recipient. And immunosuppressive therapy increases the life of the patient.

Keywords: Surgical technique donor, recipient, Back-Table

41. BENIGN JAUNDICE CHOLEDOCHOLITIASIS - SURGICAL EMERGENCY

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Introduction: Jaundice is due to failure of route intrahepatic bile- biliary duct -digestive tract, incriminated mostly of choledocholithiasis. Often the icteric manifestation of choledocholithiasis is established with a delay, which can reach a few months, which significantly increases the operative risk due to development of hepato -renal failure and to the installation of the suppurative angiolocolitis, with high rate of postoperative mortality . In the last decades technological progress has led to the creation of a successive generations of improved equipment, which enables efficient exploration of the entire biliary system. So surgical act could become more complex, being made safe interventions previously considered impossible. Surgical operations wich are performed to emergency patients are accompanied by complications and lethality reaches 15-30%, 3 times more than mechanical jaundice approached as if the emergency postponed.

Purpose and objectives: Highlighting the informational value of the contemporary diagnostic methods pre- and intraoperative in the benign mechanical jaundice made by choledocholithiasis and effectiveness of surgical treatment depending on clinical and anatomical form and the moment of its establishment.

Materials and methods: The study is based on retrospective analysis of 83 clinical observation sheets of patients with final diagnosis of choledocholithiasis, recorded the clinical and laboratory manifestations, under which were later established indications for surgery and operative time.

Results: Patients with benign jaundice refer to a subset of surgical pathology addressed as a delayed emergency, within 3-5 days, even when their etiology is not understood, if not progressing diagnostic approach. Indications for surgical treatment are choledocholithiasis diagnosed preoperatively, where the condition itself is an indication of surgical, and the suspected choledocholithiasis with subsequent intraoperative diagnosis, where the main indication for surgery is mechanical jaundice syndrome. Surgery was undertaken in all cases , in the vast majority, the nature of interventions aimed at solving both jaundice by choledocholithotomy, endoscopic papillo-sphincterotomy and drainage, as well as the progressive diseases associated, by cholecystectomy and endoscopic papillo-sphincterotomy (in the cases of dysfunction of the Oddi sphincter). Drainage method was determined by CBP diameter , so the diameter < 1.5 cm was chosen to install an external drain type (Kehr), for a diameter > 1.5 cm to perform latero-lateral choledochoduodenostomy. Postoperatively, incorporating all the data, we obtained the diagnosis of choledocholithiasis associated with comorbidities in 59 % of other adjacent structures: chronic calculous cholecystitis, stenosis of Oddi sphincter, cholecysto-choledocho-duodenal fistulas. Postoperative complications were recorded mostly at decompensated patients. Postoperative mortality was 8.4 % .

Conclusion: jaundice presents indications for emergency surgical treatment delayed if diagnostic approach is not progressing (3-5 days), especially when the adjacent structures overlapping with pathological disorders.

Keywords: choledocholithiasis, pre-/intraoperator diagnosis, contemporary surgery

42. THE ELEMENTS OF MANAGEMENT OF A HEPATIC SURGICALLY ASSISTED PATIENT

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Introduction: The number of surgical interventions made to the patients with chronic liver diseases is in a continual growth. It is due both to the growth of the number of patients as well as a greater frequency of surgical complications. Patients are exposed to a large scale of risks that are diagnosed by a chronic hepatic disease, that need a surgical intervention. The article treats on the elements that doctors have to take into consideration whenever they face such a situation as well as the way how this assistance of specialty can be.

Purpose and objectives: It is the analysis in approaching the stage of a hepatic surgically assisted patient based on a standardized report of an individualized assessment of a clinic risk.

Patients and methods: The research area was made up of 43 hospitalized patients at the Surgery Hepatobiliary Pancreatic Department, SCR, the data were collected and analyzed in many directions: pre-, intra-, and postoperator. The complete diagnosis included the disease history, the morphological aspect, the degree of liver dysfunction and portal hypertension, the existence of complications and associated diseases, the response to treatment, the evolution and the quality of life for a period of 3, 6 or 12 months – in postoperator period.

Results: The majority of patients (31 patients – 72%) were diagnosed with hepatic cirrhosis Child B. The group's average age was 38,4 years, 56% - women, 44% - men. All patients underwent an operation, that is azygo-portal devascularization and splenectomy (n=39), portosystemic shunt (n=3), hepatic transplant (n=1). Precocious postoperator lethality – 1 case (2,3%), morbidity – 6 cases (14%). The medical chirurgical assistance, made an emphasis on the possibility to initiate a preventive treatment of possible complications. Thus, it was made a prophylactic endoscopic ligature at 36 patients with esophageal veins and a high hemorrhagic preoperator risk and at 22 patients in a postoperator at the distance. The repetition of Doppler ultrasound in pursuit of portal thrombosis, in order to establish its evolution, the degree of obstruction and of an efficient treatment, has confirmed that the performed screening at the patients being at a high risk, proved to be efficient. The ultrasound assessment has confirmed the portal vein thrombosis at 3 patients (7%) using an antiplatelet and antithrombosis treatment.

Conclusions: The perioperator management of hepatic chirurgical patients is a difficult one. But a good cooperation between a hepatologist, a reanimatologist and a surgeon creates premises of a therapeutic success.

Keywords: Chronic liver diseases, management, quality of life

43. THE RISK OF PURULENT SEPTIC POSTOPERATIVE COMPLICATIONS

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Introduction: In the structure of nosocomial infections prevail purulent septic infections, which represent about 85.0 % and the total number of illnesses by septic -purulent nosocomial infections recorded in the country and 66.6 % of them occur in surgical departments.

Materials and Methods: In order to determine the actual incidence of nosocomial purulent septic infections in general surgery, the active method of diagnosis were used - by studying the retrospective observational records of patients with complications admitted to surgical aseptic departments of CNSPMU during 2010.

Results: Depending on the underlying diagnosis, the risk of purulent septic postoperative complications is higher in chest trauma (750.0%) and liver cirrhosis (667.7 %), followed by surgeries for appendicitis (446.8%) and abdominal trauma (400.0%). The study found that in patients with

duration of up to one hour, the absolute risk of developing purulent septic complications is 173.9 cases per 1000 patients, if the surgery duration was from 1 to 2 hours, the risk of purulent septic complications is 341.1 cases per 1,000 operated patients, and surgery lasting more than 2 hours increased the risk of postoperative septic infection to 416.6 cases per 1000 of patients operated. According to the results obtained in the group of patients who underwent a single surgery the incidence of postsurgical septic complications are 192.1 cases per 1,000 patients, whereas in the group of patients who have undergone two surgeries this index is 700.0 cases 1000 patients operated, which is 3.62 times higher.

Conclusions: Length of hospital stay in patients with septic postoperative complications is about 2 times higher compared to the duration of hospital stay in patients without septic complications and is, average, 12.859 ± 1.934 days/bed . On average, each case of septic, nosocomial infection, made hospital stay of the patient longer up to 7.326 days, this led to significant additional expenditures.

Keywords: surgery, purulent septic infection, septic postoperative complication

44. THE INCIDENCE OF SEPTIC NOSOCOMIAL COMPLICATIONS IN SURGICAL WARDS

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Introduction: Nosocomial infections continue to be a current issue for all medical institutions, especially in surgical profile.

Materials and Methods: We studied 462 observation forms, including 249 patients treated conservatively and 213 sheets of patients treated surgically. Were extensive and intensive use indices, absolute risk, risk attribution and the relative risk were used.

Results: The study found that of 462 patients hospitalized in the Department of aseptic surgery, 57 patients developed septic nosocomial infection, the incidence constituting 12.34%, or 123.4 cases per 1000 patients (‰). It was found that the nosocomial septic complication's actual incidence in patients treated conservatively is 3.6 % and, in the group of patients undergoing surgery, the real incidence by septic infections is 24.6%. Therefore, the absolute risk of making a septic complication, based on our study is: for patients treated conservatively - 36.14 % and among patients undergoing surgery - 246.2 %. Attributable risk of surgery for septic complications is 210.06 cases per 1,000 patients operated, and the relative risk in people exposed to surgery is 6.81. Therefore, patients undergoing surgery have about 7 times higher chance of septic complications compared with patients treated conservatively. Risk of septic complications turned out to be higher in men (44.0 %) compared with female patients (56.0 %), the incidence rate is reversed, and the incidence of septic complications is 142.85% for men and 108,1% for women.

Conclusions: The real incidence of septic nosocomial infections in aseptic surgery ward is 123.4% of hospitalized patients, including conservative treatment group, the risk of developing of septic complications is 36.0 % and in the group of patients, undergoing surgery is 246.2 %.

Key words: surgery, septic complication, nosocomial infection

45. IMMUNOHISTOCHEMISTRY PROFILE OF THE MUCINOUS LESIONS OF APPENDICEAL AND OVARIAN ORIGIN

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Introduction: Pseudomyxoma peritonei (PMP) is a rare clinical entity, characterized by a significant amount of mucinous ascites associated by peritoneal mucinous implants. The most frequent localization of primary lesion are the appendix and ovaries (epithelial mucinous lesions with varying

histopathological architecture), although other primary sites of origin were described: gallbladder, stomach, pancreas, colon, uterus, fallopian tubes, urinary bladder, breast and lungs. There are still ongoing discussions in the literature about PMP, especially regarding the origins, histopathology and adequate treatment. The biological potential of the lesions depends on several factors which may be determined at the morphological examination. The primary aim is to identify the primary lesion site. In majority of PMP cases the primary lesion is originating from appendix. In some cases, though, there may be metastases to the ovaries, which need to be differentiated from primary mucinous ovarian lesions, especially in condition of grossly normal appendix. Taking in consideration all mentioned above, epithelium from different sites manifest different immunohistochemical expressions and this may help to identify the primary lesion site. Ovary epithelium and majority of tumors originating from the ovary manifest positive expression for cytokeratin 7 (CK 7) and are negative for cytokeratin 20 (CK 20), while appendiceal epithelium and tumors originating from appendix and colon are positive for CK 20 and negative for CK 7. Another specific immunohistochemical marker for colorectal and appendiceal origin tumors is the carcinoembryonic antigen (CEA).

Materials and methods: Current paper included two cases of ovarian mucinous cystadenoma, two cases of PMP of appendiceal origin (mucinous cystadenocarcinoma) and one case of appendiceal mucinous cystadenocarcinoma.

An immunohistochemical profile including CK 7, CK 20 and CEA for all the specimens was performed.

Results: For cases of PMP of appendiceal origin (n=2) and appendiceal mucinous cystadenocarcinoma (n=1) a positive expression of CK 20 and CEA was obtained, manifested by moderate and/or intense reaction in cytoplasm and membrane of majority of tumor cells (C++/+++; M++/+++). Reaction for CK 7 was negative.

For cases of ovarian mucinous cystadenoma (n=2) a positive expression of CK 7 was obtained, manifested by intense reaction in cytoplasm and membrane of the tall prismatic epithelium (C+++; M+++). Reaction for CK 20 and CEA was negative.

Conclusion: Results obtained within the current study showed a difference of the immunohistochemical profile of the mucinous lesions of appendiceal and ovarian origin, thus confirming the available data. These findings prove that the immunohistochemical profiling may help to identify the origin of the primary lesion and this have an impact on the subsequent management of these patients

Keywords: Mucinous lesions, pseudomyxoma peritonei, immunohistochemistry

46. HEALTH-RELATED QUALITY OF LIFE ASPECTS IN PATIENTS WITH VESTIBULAR DISORDERS

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The purpose of this study was to describe issues regarding the quality of life in a group of patients (n=60) suffering from vestibular disorders and their self-rated disease, specific symptoms, disability and general functioning in everyday life, using two different self-rated instruments: the Dizziness Handicap Inventory (DHI) questionnaire and the Vestibular Activities of Daily Living Scale (VADL) questionnaire.

The results showed that the physical aspects (DHI average scale score 1.84) of dizziness mostly influenced the quality of life, followed by functional aspects (DHI average scale score 1.76) and by the emotional ones (DHI average scale score 1.35). The worst functional impairment rated by the patients from our data are in the psycho-social area such as the feeling of a restricted situation and anxiety about the dizziness and symptoms' consequence, which leads to avoidance of many activities like reading and being at high altitude. Physically, our patients were most affected by the quick movements of the head, by bending over and by looking down.

Conclusions. Our results revealed that from emotional point of view the patients presented frustration; impaired concentration and the feeling of depression. However, several impairments in daily life were not related to the disease itself. Dizziness is common in all age groups and seems to

have a significant impact on an individual's well being. Self-rated questions are an easy and inexpensive tool to identify people in need of skilled clinical examinations.

Keywords: dizziness, vestibular disorder, quality-of-life

47. SEXUAL HEALTH OF PEOPLE WITH LOCOMOTOR DISABILITIES – A COMPREHENSIVE STUDY

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Introduction: Sexuality and sexual health of people with disabilities have been neglected by the health care system across the country and region for a long period of time. Disabled people face dominant social norms that primarily hold them to be asexual and childlike, without any desire and undesirable. Although some physical disabilities directly affect sexuality by disablement of genital function, most of them do not. At national level, sexual health statistics for disabled people are almost non-existent.

Purpose of the study: To identify and define the mechanisms which affect sexual function in pathologies related to locomotor disability and to develop a patient-centred assessment algorithm regarding sexual health for people with locomotor disabilities.

Materials and methods: Evidence from all the relevant articles and bibliographic sources referring to sexual health of disabled people has been analyzed and reviewed.

Results: The study identified specific and nonspecific mechanisms affecting sexual function in people with locomotor disabilities. Specific mechanisms, such as neuro-autonomic mechanism and neuromuscular mechanism have been determined. Impairment of sexual function through neuro-autonomic mechanism occurs in transverse spinal cord injuries and in other pathologies involving the sympathetic and parasympathetic spinal center segments, reflex pathways and sensory pathways. Additionally, for a better understanding of the neuro-autonomic mechanism and a more effective evaluation of sexual function, the study suggests a diagnosis orientation focused on bony landmarks of the spine (superior injury – upper Th10 vertebra, intermediate injury - between Th10 and L1 vertebra and inferior injury – lower than L1 vertebra) not on medullar parts that physiopathology of sexual function focuses on. Through neuromuscular mechanism, the importance of motor control on sexual function was recognized. The impairment of motor control has been identified at three levels: cerebral motor neuron damage (cortical and subcortical), spinal motor neuron damage and lesions of peripheral nervous structures and muscles. More than that, neuromuscular mechanism was identified to be responsible for affecting sexual function of people with locomotor disabilities in most of the cases, neuro-autonomic mechanism being an optional one, met mostly in transverse spinal injuries. Regarding nonspecific mechanisms, the following ones were defined: genital mechanisms, complementary pathological mechanisms, psychosocial mechanisms and iatrogenic mechanisms. Thus, based on specific and nonspecific mechanisms, the patient-centred assessment algorithm on sexual health for people with locomotor disabilities was developed.

Conclusions: Existing studies on sexual health of people with locomotor disabilities are limited and statistics are almost non-existent, most of them approaching this issue from social perspective rather than from a medical one. Most studies emphasize the need of sexual health services for people with disabilities, pointing, in the same time, at the low competence of health care providers. Identification of the two specific mechanisms affecting sexual function (neuro-autonomic and neuromuscular) greatly facilitates the interpretation of sexual disorders associated to locomotor disabilities. Defining the mechanisms which affect sexual function in people with locomotor disabilities and developing the patient-centred assessment algorithm on sexual health for people with locomotor disabilities represent a special practical interest both in clinical practice as well as for further studies on patients.

Keywords: Sexual health, locomotor disabilities

48. DIVERGENT STRABISMUS OF ADULT

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Introduction: Divergent strabismus of adult represents a major importance and affects a surprisingly large number of adults worldwide. According to specialized literature, divergent strabismus is recorded in 11,8 % of concomitant strabismus and in 15-18% of all strabismus. Divergent strabismus is a rare disease and appears late as the strabismus convergent. Doctors were concerned with this eye disease from the ancient times.

Aims: The purpose of our study was to make a clinic-statistical analyze of adult strabismus

Material and methods: It was a retrospective study of 42 patients who were treated in the ophthalmology section of RCH in the period 2011-2013. Examination of patients was performed by collecting the following dates: sex, patient age, area of residence, debut of pathology, personal accidents, the subsequent treatment, the objective examination

Results: The obtained results are: 22 (52,4%) of 42 patients were male and 20 (47,6%) were female; the average diagnostic age of patients was 29,76 years, with limits between 17 and 66 years; most patients were enrolled in the age group between 20-29 years. Analyzing the group of patients according to area of patients' residence we have found that 31 of them (73,8 %) were from urban areas and 11(26,2 %) of rural one. The debut age of functional strabismus was an average of $5.1 \pm 3,2$ years; 10 patients (23,8 %) had primary exotropia and 32 patients (76,2 %) had secondary strabismus divergent.

Conclusions: According to our study, we obtained results more or less close to the statistic results that we have studied. We have noticed the difference between the number of patients in urban and rural number of patients. It was difficult to establish the age of onset of strabismus divergent because a significant number of patients of the study, 26 patients (61,9 %), in the childhood had convergent strabismus and then, from various causes, has developed divergent strabismus. We denote a higher frequency of secondary strabismus divergent compared with the primary strabismus of adult.

Keyword: Strabismus divergent primary, exotropia, strabismus divergent secondary

49. UTERINE RUPTURE IN EARLY PREGNANCY

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Introduction: The incidence of sterile couples, according to various authors, varies between 10-20%. In each region, depending on the socio-economic and cultural level of the population, the frequency of sterility in Moldova is 14-15%, Russia-10-15 %, in Romania -10-20% in France-20% and in the U.S., 30%. Experiments on IVF method implementation, in Moldova, started in 1994. First pregnancy was obtained by IVF method, at the end of 1995 and ended with the birth of a boy weighting 3500 grams. Wider use of IVF method began in 1997, together with the implementation of transvaginal ultrasound in monitoring of stimulation cycles and echographic sampling of the oocytes. Since then, many couples who have lost all hopes of having a child were able to enjoy the opportunity to be parents. Normal course of pregnancy occurred through IVF, otherwise as in the case of pregnancy occurring physiologically, depends on a whole team of physicians, who's main task is to prevent the occurrence of complications that can affect both the mother's life as well as the life of the child.

Purpose and Objectives: Presentation of a clinical case of pregnancy, with duplex occurred after IVF, which in the period of 12 weeks had a less favorable evolution, endangering the patient's life and depriving her of the opportunity to further being able to have children.

Materials and methods: A 29 years old patient, third pregnancy, nulliparous, 12 weeks

pregnancy after IVF, COA (bilateral salpingectomy) - in a progressively worsening condition, altered neuro-psychological status, Bp 50/0 mmHg, Ps 112, respiration 23/min, on palpation of the abdomen-abdominal muscles' endurance, ultrasonography determines - uterine pregnancy, monofetal, in terms of 12 weeks with positive fetal heartbeat, in the abdominal cavity - fluid up to diaphragm.

Results: Were performed lower median laparotomy and in the abdominal cavity were found: a product of conception with the placenta, endometrial fragments, 2500 ml blood, the source of the hemorrhage being rupture of the uterus. A decision was made to perform subtotal hysterectomy with preservation of the cervix and ovary. Postoperatively, on sectioning the uterus were found: another product of conception and an intramural myomatous node of 6 cm.

Conclusion: Due to the complexity and difficulty in the diagnosis of acute abdomen, on the uterine pregnancy background, the case was served by sanitary aviation team. The patient's life was saved, but reproductive organ preservation was not possible.

Keywords: IVF, subtotal hysterectomy, salpingectomy, COA, myomatous node

50. ECHO GUIDED BIOPSY IN DIAGNOSIS OF PROSTATE CANCER

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Introduction: According to the 2008 Guidelines on Prostate Cancer (PC) from the European Association of Urology (EAU), transrectal ultrasound (TRUS)-guided core biopsy of the prostate using a spring-loaded needle device is the standard way to obtain material for a histopathological examination of the prostatic gland. Today, elevated levels of prostate-specific antigen (PSA) in the serum are the most common indication for prostatic biopsy, because early stages of prostatic cancer are often neither palpable during digital rectal examination nor visible in TRUS examinations. There is little consensus about the number and localisation of cores that should be taken. This article focuses on the development of the procedure, current clinical practice according to the literature and possibilities of further optimisation of prostate biopsies.

Propose and objectives: Studying the current data about the role of echo guided biopsy in diagnosis of PC. Evaluating the elements of anatomy and physiology of normal prostate and of prostate affected by cancer. Evaluating the classification and stadialisation of PC.

Materials and methods: 1. Evaluating the methods of diagnosis of PC and appreciating the value of ultrasound in primary biopsy and in repeat biopsy for detection of PC. Clinical case presentation Medline – 10 sources, Up to date – 7 sources, Medscape – 15 sources, Evidence-based Guidelines for Best Practice in Health Care , Transrectal Ultrasound Guided Biopsy of the Prostate 2011, other sources – 20; 2. Studying the anatomy and physiology of normal prostate, and of prostate affected by cancer , and methods of diagnosis and monitoring of prostate cancer; 3. Studying of medical cases of patients with a suspicion to have PC

Results In the past decades two factors have been significantly influenced PC detection rate and the infraclinic discover: the extensive use of prostate specific antigen (PSA) as screening instrument and the schemes of ultrasound transrectal extensive multiple prostate biopsy. The digital guided biopsy is already history and the era of sextant biopsy being passed over the extensive biopsies have become the standard of PC detection. If we consider the detection of any price lead to overdiagnose and overtreatment of insignificant and unsympomatic cancers and the PC could be considered after some authors a chronic disease, it must searche for less aggressive solutions to avoid unfavorable effects of treatment, keeping long lasting good quality of life. It is looking for precise criteria for establishing active surveillance protocols to postpone the treatment for insignificant cancers but also to allow the right moment to start it.

Conclusion: Echo guided biopsy is the golden standard in detection of prostate cancer. Prostate biopsies are the most important step in the diagnose of prostate cancer. To be correct has to be lateralized and in big number. The number of cores depends on prostate volume, age, digital rect examination and prostate specific antigen

Keywords: prostate cancer, echo guided biopsy

51. PROBLEMS AND PROSPECTS IN THE CARE OF CHILDREN WITH EXTREMELY LOW BIRTH WEIGHT (500-1000 G)

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Introduction: Today everyone widely is discussing the problem of prematurity, births and children born between 22-37 weeks gestation terms, which in turn form the high rate of perinatal and infant mortality and morbidity.

News this problem is caused primarily by the increased number of premature birth, which over the past three decades, including in developed countries, despite the progress achieved in the field of maternal-fetal medicine remained unchanged, keep it between 10-15% industrially developed countries to 30% in developing countries. One of the negative factors that maintain increased growth rate of premature birth is worsening reproductive system as a consequence of many factors both medical as well as social. From year to year the number of men and women with different reproductive system disorders, in most cases acquired since the period of adolescence. They increased growth and cause reproductive losses particularly perinatal mortality and morbidity. An important role in the increased incidence of premature births and implementing it has broadly of new technologies in the reproductive system, such as an assisted reproduction.

Regarding Moldova in terms of "modern life" today have accumulated a lot of factors that maintain a high level of reproductive losses. Precarious economic situation, low education and living, drain the migration, the new model of sexual behavior and reproductive early beginning of sexual life, frequent change of sexual partners, increase in sexually transmitted diseases and sterile couples, maintaining a high level of number of abortions, form causes a negative influence on the function of procreation.

This problem generates dilemmas, which in a stable correlation with perception change lives and human existence.

As said above confirmation, in Moldova in recent years a number 38 500 1200 ectopic pregnancy birth registers, whose number increases from year to year, 3082 miscarriages and pregnancy stopped evolving, 10312 abortions on demand 542 after a medical abortion, 142 social reasons, 450 newborn deaths in the pre, intra and neonatal. In the first year of life die 350 children, reproductive loss reaches 16 078 cases, one third of all the products of conception.

In 2012 the Republic of Moldova were recorded 1,500 teenage abortions, which constitute 12% of all abortions, but the actual number is much higher if we take into account that many abortions remain unregistered. A rather high percentage of losses reproductive and perinatal mortality infatible handle.

Annually in the world 131 million children are born, 13 million premature tooth 1 million die in the care of premature infants perinatal. Treatment and shows a rather complicated problem if we consider these children are born with a disorder poly-systemic and most pathology cases with preexisting maternal pregnancy. These children consume huge material resources for the care and rehabilitation of late deficiencies often encountered. It can not remain without attention and the ethical and moral dilemma.

The mechanisms that cause premature birth until now not yet fully elucidated current treatment methods, particularly the prevention cannot be considered highly effective, and those aimed at improving fetal prognostic not solve all the problems premature babies.

However the progress of medical science in recent decades, including in the field of obstetrics and perinatal mortality showed that both morbidity as well as premature babies can be reduced including and between children with extremely low birth weight (ELBW) (500-1000 g).

These results were obtained using extensively in the last decades corticosteroids, surfactant enhancement of the care children during neonatal resuscitation and intensive care wards.

There are 70-80 years since twentieth century many European countries began to include in statistical agencies national all stillbirths and live weight of 500 g and gestational age 22 weeks.

Objectives: Based on the above, we conducted a retrospective study aimed at elucidating the following objectives: to establish in incidence of preterm birth (including 22-28 weeks) in co-report

to the terms of gestation, risk assessment of the main factors that cause preterm birth between the terms ' gestation 22-28 week, setting the level of perinatal loss and survival rate of children with extremely low birth weight (ELBW) premature complication assessment during the first year of life.

Materials and methods: The Republic of Moldova to the requirements of WHO, Ministry of Health according to order children born with extremely low birth weight began to be subjected to official registrars 01.01.2008. This reform, both in the medical, statistical information and in the correct state was oriented to standards and criteria for implementing European registration for births and deaths and ensuring comparability of national indicators worldwide.

Today, in the Republic of Moldova are well known results of numerous studies regarding the terms of preterm birth between 28 weeks gestation, but lacks domestic science results preterm birth and preterm babies born between 22-28 weeks gestation terms.

In our study included 830 patients, 860 children who were born extremely low birth weight. According to a questionnaire there were examined obstetrical-gynecological case history data highlighting general somatic status and current complicated tasks.

Among the most common causes of premature births were caused miscarriages and artificial infection, adverse conditions of work tasks obtained through assisted reproduction, stress.

To study the mortality and morbidity of children in remote medical documentation there were analyzed both sectors resuscitation and intensive care as well as the sector and one of rehabilitation outpatient clinics.

Results: The results have demonstrated that during 2008-2012 in Moldova were registered 197 384 births, including 9459 premature, of which 830 between 22-28 weeks gestation terms . Therefore, the incidence of premature births was 4.8%, this indicator is much lower than in many European countries. The incidence of children born between 22-28 weeks gestation terms was 0.4 % to the total number of births and 9.1 % of all premature births.

Most children ($70.70 \pm 1.55\%$) were born between 22-26 weeks gestation terms, which caused high rate of perinatal deaths.

Analyzing the results we found that of 863 perinatal infants born, 283 ($32.8 \pm 1.59\%$) died antenatal, intranatale 51 ($5.9 \pm 0.08\%$) living or born 529, of which 305 ($57, 7 \pm 1.68\%$) died in the early neonatal period.

An interest in the results table development of children with extremely low birth weight (ELBW) who survived and were discharged home. To elucidate this issue, we analyzed 75 children born at 26-28 weeks gestation periods. Out of 75 children discharged home nine ($12.0 \pm 3.75\%$) died during the first year of life, only 10 children matched normal physiological development, the other 56 children were found various neurological impairments.

Conclusions: Thus, among the most common causes that caused the premature birth were: infection, gynecologic disease, and artificial miscarriage, premature births, multiple pregnancies, stress.

Level perinatal loss among children born with extremely low birth is 3-4 times higher than the same indicator certified in perinatal centers of developed countries.

Taking into consideration that up to 25 weeks of gestation did not survive any child resuscitation of these infants must be exercised only at the insistence of parents, but the stillborn should not be included in official statistics.

To increase the weight and survival of children with extremely low mass of Moldova perinatal centers require more efficient procurement of new technologies as well as providing necessary medication to treat these children. The costs of caring for a child with extremely low birth that has survived and was discharged home 19 400 lei.

Scientific research of premature births, including 22 to 28 weeks gestation periods in the future should be directed to conduct optimization imminent withdrawal pregnancy, birth and behavior improve child care in the neonatal period and during the first years of life.

Keywords: premature births, children with extremely low birth weight (ELBW), perinatal mortality, reproductive losses

52. SOME ASPECTS OF OTOGENIC MENINGITIS

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Introduction: Orogenic meningitis is the commonest intracranial complication of suppurative otitis media and continue to be an important cause of morbidity and mortality despite the availability of effective treatment. It is an inflammatory process of pia mater, arachnoid and cerebrospinal fluid in the subarachnoid space due to middle ear pathology that is very dangerous to patients lives caused by symptoms and association with other intracranial otogenic complications. Orogenic meningitis are not frequently encountered in practice but should be known by specialists (internists, ENT, infectionists, pediatrics, emergency medicine physicians, etc.) because these neuroinfections constitute major medical emergency and requires prompt medical intervention.

Materials and Methods: In this study was analysed relevant articles on the topic, using PubMed, Hinari data base and other internet and literary sources. The study was conducted on a group of 165 patients with intracranial otogenic complication of ENT clinic for the period of 10 years (2001-2010). Data were processed using computer programs Microsoft Word, Excel, Stats Direct Statistical Software Version 1,9,5.

Results: Patient age was between 18-70 years and average of 41,23(\pm 1,98). 55,75% (92) of them were males and 44,25% (73) were women. Isolated otogenic meningitis was determined in 38 (23% \pm 3.28) patients and 112 (68% \pm 3.63) patients - otogenic meningitis associated with intracranial otogenic complications. Symptoms of complications was headache (100%), fever (97%), photophobia (26%), irritability (78%), drowsiness (16%), vomiting (16%), neurological signs (100%).

Conclusion: We determined the following aspects:

1. Orogenic meningitis is one of the most current problem in otolaryngology
2. Orogenic meningitis incidence is an index reflecting the otorhinolaryngology medical assistance and health culture of the population
3. Isolated otogenic meningitis is rarely encountered, more frequently are meeting associated with intracranial otogenic complications

53. EARLY PRENATAL DETECTION OF FETAL ABNORMALITIES

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Introduction: Prenatal screening for chromosomal abnormalities has become standard practice in many countries worldwide. Second-trimester risk evaluation is a frequent demand of prenatal ultrasound screening in many obstetric units.

Objective: To investigate the performance of first trimester ultrasound and biochemical examination in the prediction of fetal structural anomalies and aneuploidy.

Methods: This was a prospective study of 902 pregnant women with increased fetal malformation risk in the I and II trimesters of pregnancy. Selection criteria of pregnant women at risk were: advanced maternal age, pathological obstetric and family history.

Results: The analysis of ultrasound fetal abnormalities in pregnant women assessed in the first trimester (83 cases), concluded that most frequently was noted increased nuchal translucency and cystic hygroma - in 53 (63.8%) cases, followed by hypoplasia of nasal bones, dismorphic profile, modified facial angles - 23 cases (27.7%, $p < 0.01$). Rarely were detected ductus venous pathology - in 2 cases (2.4%), omphalocele (1.2%), exencephaly (1.2%) and spinal pathology, represented by the absence of intracerebral clarity - in one case. Nuchal fold and nasal bone hypoplasia were the single most sensitive parameters to identify fetuses with trisomy 21. In 2 of 4 cases, cystic hygroma caused was combined with fetal hydrops in one case (2.04 %) and unique umbilical artery - in 3

cases (6,1%). Some of the anomalies detected in the first trimester were associated with structural abnormalities detected later in pregnancy.

Conclusion: Screening in the first trimester of pregnancy offer the advantage of early detection of structural malformations and ultrasound markers. The most effective screening test for anomalies is the integrated test based on the integration of the first trimester and the second trimester ultrasound markers.

Keywords: first trimester; genetic sonogram; aneuploidy

54. URBAN MYTH VS AWARENESS CAMPAIGN: PATIENTS' OPINION REGARDING ORGAN DONATION

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Introduction: Organ donation is a controversial subject, vital for many patients survival but also criticized by some religions and cultures which lead to more and more reticence.

Propose and Objectives: Evaluation of hospitalized patients' opinion, after an important "pro-organ donation" national campaign, regarding organ donation, for finding out the compliance in this problem, their information and their choice on this topic, starting from the idea that in hospital, the patient is more vulnerable mentally and emotionally, with a higher cure wish.

Materials and Methods: 200 patients from Emergency County Hospital Targu Mures between 2-5 July were asked for completing an anonymous questionnaire. Sampling method – nonprobability. Excluding criteria - daily hospitalized patients and under-age. I have analyzed: age, gender, background, training level, occupation, religion, if they have discussed with their families about organ donation, if they/their family would agree with organ taking for some member of their family/they, if they know the Romanian organ donation legislation, if they would accept an organ if they would need it; if they don't agree-why?; and if they agree-what organ would donate?

Results: From 200 patients only 92 were agree to complete the questionnaire, 4 were invalid, so the answering rate was 42%. 108 patients refused to complete, arguing fear, mistrust and religious motivation.

-62% orthodox, 23% Calvinism, 5% Catholic, 10% others

-43% retired, 16 % without occupation, 6% students, 13% medical/trade/educational workers, 21% others.

-35.2% patients have already discussed with their families, 64.8 have not

-63.36% would be agree with organ taking from some member of their families, 36.64 % would not

-51.04% their families would be agree with their organ donation, 12.32% would not, 14.08% don't know

-16.72% know the law, 83.28% do not

-66% would accept receiving an organ if they would need it, 34% would not

-1.76% they disagree because they don't accept body manipulation, 0.88-mistrust in medical system, 3.52% religion, 8.8% they don't know why, but they disagree

-57.2% would donate everything which can be used, 4.4% everything except skin, 0.88% everything except heart, 0.88% don't know what to donate.

Conclusions: The survey shows a high wish for organ donation, which is contrary to the hospital reality, the real refusal rate in 2013 was 68.42%, but the explanation probably is the high number of refusal in questionnaire completing. Organ donation is still considerate a taboo subject, fact indicated by the lack of education in this domain, ignorance of the law, carelessness mistrust and misunderstand religious ideas- which are the main obstacles in raising the number of organ donators.

Keywords: organ donation, survey, patients' opinion

55. OUR EXPERIENCE IN THE SURGICAL TREATMENT OF ACROMIOCLAVICULAR DISLOCATION

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Background: Acromioclavicular dislocation is not a rare post-traumatic lesion. The treatment is still a controversial problem due to the inconstant results of the orthopaedic or surgical approach. The proof is the very high number of methods developed over 50 orthopaedic treatments and over 140 the surgical ones. Starting from Weaver-Dunn procedure we have performed a surgical technique which had pleased us with its results.

Material and methods: We have performed a surgery on 21 patients (17 males and 4 females) aged between 23 – 47 years which had a clinical and radiological diagnostic of acromioclavicular dislocation. The surgical technique uses the coracoacromial ligament which is reinserted into a tunnel in the lateral third of the clavicle and is fixed with a screw. In 13 cases we cut the ligament straight from the bone and reinforced it with a Nr.1 polyglactine or poliglicolic acid wire, and in 4 cases we harvested it with its acromial bone insertion to achieve more length and strength of fixation. Also the acromioclavicular joint it was secured with a K wire for more stability. We have immobilized the shoulder for 28 days, and the kinetotherapy was performed for another 14-21 days. The wires were removed after 6-10 weeks, the interference screw was not removed. In 3 cases the coracoacromial ligament appeared to be too short for our purposes, and we converted the procedure to another technique. The follow-up period lasted no longer than 3 month in all cases and was done when the patients have returned to their previous activity.

Results: After kinetotherapy fast and good recovery was obtained with full or almost full range of motion also, good stability and mobility of the shoulder was obtained. We haven't encountered any recurrent dislocation in 17 cases. In 3 cases we had a too short coracoacromial ligament, in one of these 3 cases our procedure failed and in the other 2 cases we saw the failure from the beginning of surgery. In all 3 cases we have converted the surgical technique to another procedure. These cases were excluded from final evaluation. The Glorion-Delplace score was 10 in 14 cases and 9 in 3 cases, due to the lack of shoulder mobility. The heterotopic ossification was encountered in 6 cases, but pain-free and with no impair on the joint function, a pain-free shoulder was noticed in all cases.

Conclusions: This technique is faster (30-60 minutes) and easier than current procedures (Dewar-Barrington or Weaver-Dunn procedures). This procedure is more physiological than all others – replaces a ligament with another in about the same position. It also provides a passive stability and it doesn't modify the forces exerted on the bone, there is no momentum exerted on clavicle.

56. THE RELATIONSHIP BETWEEN PLACENTAL LOCATION AND FETAL GENDER (RAMZIS METHOD), AMONG PREGNANT WOMEN IN MOLDOVA

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Introduction: One such study was conducted by Saad Ramzi Ismail in 2011. We intend to apply the same study among pregnant women in Moldova, to compare the results obtained by Dr. S. Ramzi with ours.

The aim of this study is to determine the relationship between placental /chorionic villi laterality and fetal genders early in pregnancy using 2-D ultrasonography and color flow Doppler.

Material and Method: Cohort study was conducted on 41 pregnant women who have undergone a Trans-Vaginal sonograms at 6 weeks pregnant, and Trans-abdominal sonograms were used at 18-20 weeks gestation, at this time the fetal gender were confirmed in 98-99%. The fetal sex will be confirmed 100% after birth. The result was tabulated according to gender and placenta / chorionic villi location.

Result: Dramatic differences were detected in chorionic villi / placental location according to gender. 83.3% of the male fetuses had a chorionic villi/placenta location on the right side of the uterus whereas, 16.7% had a chorionic villi/placenta location to the left of the uterus. On the other hand 91.3% of female fetuses had a chorionic villi/placenta location to the left of the uterus whereas, 8.7% had their chorionic villi/placenta location to the right side of the uterus. Same results received Dr. S. Ramzi, but with greater precision, 97.2% of the male fetuses had a chorionic villi/placenta location on the right side of the uterus whereas, and 97.5% of female fetuses had a chorionic villi/placenta location to the left of the uterus whereas.

Conclusion: This method is using placenta /chorionic villi location as a marker for fetal gender detection at 6 weeks gestation was found to be highly reliable. This method correctly predicts the fetus gender in average 90% early in the first trimester. This study may help parents to decide and choose the type of medical management available in case of inherited genetic problem such as in X-linked genetic disorder.

Keywords: Placenta, Fetal Gender

57. EARLY DIAGNOSIS OF ADOLESCENT IDIOPATHIC SCOLIOSIS IN THE ABSENCE OF SCHOOL SPINAL SCREENING PROGRAM

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Introduction: Adolescent idiopathic scoliosis (AIS) is a three-dimensional deformity of the spinal column and associated rib cage characterized by a lateral deviation and axial rotation. Scoliosis remains an actual problem of pediatrics and orthopedics around the world. Uncorrected static deformation presents an important major factor in the development of structural changes in the spine and diseases of internal organs, which then results in a decrease or lack of work capacity in adulthood. Childhood disability due to scoliosis is 8-9% in the structure of disabled children. Early diagnosis provides adequate correct conservative treatment, may stop or reduce progression of scoliosis curves and avoid surgical intervention.

Materials and methods: Since 2006 there no school orthopedic examination program in Moldova. A project initiated by the author has been started in the schools of Chisinau city. School spinal scoliosis screening was performed in 1015 pupils aged 10-17: there were 493 (48,6%) girls and 522 boys (51,4%). Clinical orthopedic examination of the spine was performed using six standard positions including Adams' forward bending test and the scoliometry - measurement of angle of trunk rotation (ATR). Five degrees of ATR was chosen as cut-off point for referral to radiography.

Results: 41 (4,04%) adolescents were found positive on both standing, forward bending test and scoliometer measurements $> 5^\circ$. There were 29 (70,7%) girls and 12 (29,3%) boys. Definitive diagnosis was confirmed on standing spondilography. The individual treatment program was created for everyone.

Conclusions: School spinal screening permits the early diagnosis of scoliosis that provides us to predict the curve progression at the beginning, to choose the correct treatment program that significantly decreases the rate of spine deformities treated surgically. This program of early diagnosis of adolescent idiopathic scoliosis makes the first steps in the Republic of Moldova. We hope that in the future it will develop to the high level and will cover all the young population of the country.

Keywords: Adolescent idiopathic scoliosis, early diagnosis, spinal screening, scoliometry

58. SURGICAL MANAGEMENT OF HYPEROPIC ASTIGMATISM IN AN EYE WITH CORNEAL LIPOMA: CLINICAL CASE REPORT

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Introduction: Though there are several medical and surgical methods of astigmatism control, astigmatic eyes with corneal surface deformities due to trauma, surgery or tumors are difficult cases, when very few methods can be helpful. In case surgery is chosen, the ultimate refraction will depend upon the tissue's healing. Toric IOL implantation is to be considered in such cases, being more physiological, effective and predictable compared to corneal refractive surgery.

Materials and methods: The work is based on the case of a patient with corneal stromal juxtalimbal lipoma that worsened the pre-existing hyperopic astigmatism. The chosen technique was the excision of the tumor with careful adjustment of the wound margins as a first step and the implantation of the AcrySof Toric IOL as the second step. The spherical power and axis placement to achieve emmetropia were estimated using a web-base Toric IOL calculation program. Special attention was given to pre- and postoperative keratometry data.

Results and discussion: The best corrected visual acuity increased rapidly after the first surgery, from 0,09 to 0,4. The postoperative corneal sequelae resumed to a fine juxtalimbal stromal opacification. The visual acuity after IOL implantation was 0,6. Though corneal healing lasted a little longer than average, later examinations showed progressive improvement of visual functions and no complications.

Conclusions: The use of Toric intraocular lense proved to be a safe choice in astigmatism treatment, taking into consideration the pre-existing excised corneal lipoma. The accurate tumor excision with proper sutures positioning provides a fine healing response which, along with the proper IOL axis alignment, assures a good refractive outcome with less risks.

Keywords: astigmatism, Toric intraocular lens, corneal lipoma

59. CONTEMPORARY DIAGNOSTICS AND TREATMENT IN CHILDREN WITH OTITIS MEDIA

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Introduction: Otitis media (OM) causes hearing impairment, and impact on a child's speech, learning, social, physical, emotional and educational development. Untreated OM can result in chronic discharge from ear with intracranial life threatening complications. Acute (AOM), recurrent OM (ROM) and OM with effusion (OME) needs differential diagnostics and intensive treatment including surgical one. Early detection of persistent and chronic otitis media and associated hearing loss facilitate to avoid cronicization and psiho-social consequences.

Purpose: to evaluate the contemporary trends in diagnostics and treatment of OM in childhood.

Materials and methods: Total 156 children with AOM, ROM, OME were included in the Project. The middle ear status was assessed by screening-otoscopy, otomicroscopy, screening-impedance audiometry, complete impedance audiometry, and conventional audiometry. Results of examination were compared with the surgery data. All children received treatment according to therapeutic algorithm. The effectiveness of this management of OM was eluated by analysis of hearing, quality of life and general health dynamics.

Results: The audiological tests were sensitive to 97-99% of OM cases, screening otoscopy - to 57%. Chronic and recurrent forms of OM were diagnosed by impedance audiometry and otomicroscopy in dynamics. Surgical treatment – myringotomy was applied in 4% of children with AOM, myringotomy with tympanostomy tube insertion in 88% of children with ROM and 33% of children with OME.

Effectiveness of this management was confirmed by stable hearing improvement in 91% of cases, quality of life and general health positive dynamic in 94% of children with OM.

Conclusion: The differential diagnostics of OM in childhood is based on the complex of screening tools and complete otological examination. The management of OM in childhood includes balance of medical and surgical approaches.

Keywords: Otitis media, diagnostics, management

60. SURGICAL MANAGEMENT OF OVARIAN DERMOID CYSTS IN CHILDREN AND ADOLESCENTS

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Introduction: The ovarian dermoid cysts are one of the most common neoplastic ovarian injuries found both in children and teenagers. For the girls with small ovarian diseases organ preserving operation it's extremely important for a proper functioning of puberty and future fertility.

Purpose and Objectives: The aim of study was to present the reasons for making these surgeries in all the cases of ovarian dermoid cysts in order to ensure fertility and menstruation every month.

Methods and materials: A prospective and retrospective analysis of all the ovarian cysts both in children and teenagers aged between 8 and 18, from the year 2000 through 2012 admitted in the Institute of Mother and Child Care, the department of operative gynecology was performed.

Results: The ovarian dermoid cysts were localized mostly in the right side having a percentage of 64.7 vs. 35.3 for the left side. Cysts outermost dimension were 79.6 ± 7.2 mm (95% CI:64.30-94.82) and minimum were $- 65.1 \pm 6.5$ mm (95% CI:51.21-79.04), from 56 to 156 mm. Laparotomy was the surgery that was mostly used - 14/17 (82.4%), and laparoscopy was done only in 3/17 (17.6%) cases. All of the organ preserving operations were statistically more common ($p < 0.001$) over ovariectomy and were 14/17 (82.4%) vs. 3/17 (17.6%).

Conclusions: It is vital to have a proper surgical approach for all the children and teenagers with ovarian cysts for maintaining a good sexual growth and fertility in the near future. These surgeries are the best method for this group of patients.

Keywords: Ovary, dermoid, pediatric and adolescent, ovary-sparing surgery

61. ASPECTS OF SURGICAL TREATMENT OF THORACO-LUMBAR VERTEBRAE FRACTURES

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Introduction: Vertebrae fractures of the thoracic and lumbar region are severe injuries that can seriously compromise the functional outcome, rarely the vital one of transmitters, leading to invalidity.

Purpose and Objectives: to evaluate the results of different methods of surgery, to highlight the most optimal solutions and successful treatment of thoraco-lumbar spinal trauma.

Materials and methods: the study is based on the analysis of demographic, imaging and clinical results of 36 patients with dorsal-lumbar fractures of the spine admitted to the Vertebrology Clinic of the SCTO PMSI Hospital. Data analysis was performed using International Spine Tango Module program.

Patients were divided into 2 groups of patients based on the surgical treatment they underwent. I group: patients that had PSF (posterior screw fixation) - 72,2 % (n=26); II group: patients with AF (anterior fusion) + PSF - 27,8% (n=10).

Results: Identified causes of the thoraco-lumbar spinal trauma were catatrauma- 69.4% (n = 25), road accident - 19.4% (n = 7), falling from the height of their body - 11.2% (n = 4). Among the most frequently injured vertebrae are Th12, L1 and L2. The average age of patients at the time of trauma was 34 years (18 to 68 years. Male / female ratio is 1.6 / 1 (22 men, 14 women).

Pre-traumatic VAS score was calculated retrospectively and showed an average of 89.7 (62-100). The VAS score calculated 9 months postoperative was 74.8 (18-100).

On admission, 11 patients were found with neurological deficit (Frankel / ASIA D). The neurological deficit regressed in 10 patients (Frankel / ASIA E), one patient still presents minor problems with the pelvic organ functioning.

Radiological results: Consolidation was observed radiographically in all of the cases in AF + PSF group. A case of pseudoarthrosis accompanied by the damage of the construction was found in the group of PSF.

Complications: early complications requiring revision surgery occurred in 3 cases, late complications presented in one case.

Conclusions: using combined approach allows higher stability of the affected segment during the postoperative period and minimum risk of degradation of this construction. Both variants of surgical corrections of traumatic deformities of the dorsal-lumbar spine ensured the achievement of good clinical results with no statistical difference between them.

Keywords: posterior screw fixation, anterior fusion

62. SURGICAL TREATMENT OF PEDIATRIC BURN INJURIES

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Introduction: Management of burned children is a critical and complicated piece in the overall care of the burned child. The basic method of intensive treatment of patients with very deep burns is an immediate correction of hemodynamic disorders, detoxication, brushing or scraping debridement, topical antimicrobial agents and the use of early excision and skin grafting.

Materials and Methods: The treatment of deep burn injuries in children up to 18 years are characterized by high social importance. Burn wound or surgical wound can be treated as "clean" and according to this processing is performed primary surgical - necrectomy which applied early after trauma. Primary goal is to prevent infectious complications in wound. Of the 156 participant children 76 had been operated in the Institute of Mother and Child and Intensive Care Unit in Chisinau. They were divided into three groups depending on the surgical procedures applied in each case: (1) Early excision and autografting of burn wounds- 29 (38,3%); (2) Wound dressing and autografting after Escher separation 47 (61,71 %).

Results: (1) Early excision and autografting of burn wounds: tangential and fascial. Excision was indicated in 16 patients with intermediate burns when lesions were not infected. Principle of tangential excision - removal of eschar sequential thin layers until viable tissue is reached. Conceptually, the intervention seems simple, but in practice requires experience and good technical condition. Fascial excision is performed for very deep burns, full thickness burns on large areas, life threatening, or infected burns (full thickness or intermediate). This group included 20 patients with deep burns gr. III B, IV. (2) Wound dressing and autografting after eschar separation. The objectives of this early period after trauma methods are: the removal of eschar, which is a cause of infectious complications of wounds, and the preparation for dermoplasty or autografting.

Conclusions: The research revealed that the evaluation of risk factors and complication depend on medical and surgical methods (necrectomy early or late) within 7 days after trauma. Surgery becomes mandatory for recovery and decrease risk of purulent septic complications and monitoring of predictive factors.

Keywords: burns, surgical treatment, pediatric

63. PATIENTS' ATTITUDE REGARDING PREANESTHETIC INFORMATION

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Introduction: The preoperative visit by the anesthesiologist is not only a way to obtain information about the patients' medical condition, but also a good opportunity to educate the patients about the impending anesthesia in order to allay fear, doubts and misinformation. The addressed topic is the current one, given that there is no consensus on the content, the form, and the time of pre-anesthetic information and implicitly of obtaining informed consent.

Purpose and Objectives: The study examined patients' opinion regarding pre-anesthetic information, namely by assessing the quality and the form of general information about anesthesia, the information on the risks and complications, revealing patients' preferences, and determining the quality of obtaining informed consent.

Materials and Methods: 100 patients, ASA I-II, >18 years old and scheduled for elective surgery, participated in the study. In order to assess the patients' opinion, their preferences regarding general information about anesthesia and its risks and complications, two questionnaires were used. Statistical analysis was done with SPSS software, the Kruskal-Wallis and Dunn tests, and crosstab methods were used. A $p < 0.05$ was considered statistically significant.

Results: The assessment of quality of informing about anesthesia showed that 55% of patients were not informed about alternative methods of anesthesia, 65% / 85% - about drugs and instruments being used, 40% / 43% - about when they could eat, and mobilize from their beds. Information related to the ability to ambulate (95%) and to resume the oral intake (97%) were sought after. Most responders wanted the methods of anesthesia (77%). Information about pain and its relief were deemed important by the patients (90%). Only 43-57% of patients were interested in the duration of anesthesia and the drugs being used. Concerning the possible complications, 78% prefer to know about frequent complications, and only 36%/34% about moderate and rare complications. Although 94% have signed informed consent, only 22% know its contents. Also it was found that patients with higher education had higher desire for information than those with primary education, ($p < 0.05$).

Conclusions: Most of the patients do not obtain general information about anesthesia. There is a trend of greater interest to information regarding interference of anesthesia with daily life than to technical details. They also showed less interest about risks and complications of anesthesia. There is a qualitative and quantitative disproportion in obtaining informed consent. Patients with higher education degree had a greater desire for information than those with primary education.

Keywords: information about anesthesia, informed consent, complications of anesthesia

64. OCULAR COMPLICATIONS IN PATIENTS WITH MARFAN SYNDROME - CONSIDERATIONS ON TWO CLINICAL CASES

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Introduction: Marfan syndrome is an autosomal dominant connective tissue disorder due to mutations in the fibrillin 1 gene (15 q21.1). Ocular features are highly variable and may be complicated by blindness. Ectopia lentis (subluxation of lens) is a hallmark feature of Marfan syndrome (according to international Ghent criteria) and is present in approximately 60% to 80% of patients; in most cases it is found until the age of 10.

Materials and methods: The authors present two clinical cases of 2 children with predetermined Marfan syndrome with bilateral ectopia lentis, admitted to the Medical Center Ophthalmology "Ovisus".

Results: In the 1st case both eyes underwent extracapsular lens extraction by phacoaspiration

with a scleral fixated capsular tension ring (right eye) and a non-sutured capsular tension ring (left eye) and primary implantation of IOL (26,0D for RE and 27,0D for LE, AcrySof IQ) in the capsular bag. In the 2nd case, the bilateral lens dislocation was treated by lensectomy with primary implantation of scleral fixation IOL (18,0D for the right eye, 24,0 D for the left eye).

Discussion: Ophthalmologists play an important role in detecting Marfan syndrome. The diagnosis and management of the many associated ocular disorders is challenging. Patients should be instructed to seek immediate ophthalmological consultation if light flashes, floaters or any sudden decrease of vision occur. Timely diagnosis and treatment of refractive problems, retinal detachment and glaucoma can prevent amblyopia and help to preserve sight in patients with this syndrome.

Conclusions: Management of ocular complications in Marfan syndrome must be multidisciplinary and include a treatment plan tailored to each individual's manifestations. Due to zonular reliability and resulting capsular instability, the correction of the aphakia with intraocular lens implantation in lens subluxation is a challenge. In some cases, subluxation can be compensated by optical correction, but this does not prevent other complications. Surgery, though difficult, provides an improved, stable visual acuity, preventing amblyopia (in children). At the moment, one of the methods of choice is extraction of subluxated lens with capsular ring placement (with or without scleral fixation) and primary implantation of the IOL in the capsular bag. Eye control is performed annually and assesses intraocular pressure, peripheral retina, the optic nerve and refractive disorders.

Keywords: Marfan syndrome, ocular manifestations, lens subluxation, surgical treatment

65. ULTRASOUND INTEGRATED NEURONAVIGATION - STANDARD TOOL FOR PLANNING AND GUIDANCE IN THE NEUROSURGERY

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Introduction: Reliable intraoperative orientation in neurosurgery is essential. Anatomical topographic landmarks, frame based and frameless neuronavigation, iUS allow the neurosurgeon to localize the lesion and surrounding structures, to aid in optimizing the approach and achieve safe maximal resection. In recent years there has been a significant improvement in the quality of ultrasound imaging. Intraoperative ultrasound provides low cost real time imaging that is simple and rapid to use.

Objectives: Ultrasound integrated neuronavigation can be used to optimize the approach and achieving safe maximal resection, thereby improving outcomes for patients with different localization and histology of brain tumors, vascular pathology and spontaneous intracerebral hemorrhage.

Material and methods: Since 2007 till 2010, in the Institute of Neurology and Neurosurgery, 130 operations with application of 2D iUS have been performed. Starting from March till May 2012, 17 patients went under surgical treatment using the intraoperative ultrasound integrated neuronavigation system.

Results: We applied ultrasound neuronavigation system in 17 cases on patients with diverse pathologies, including brain tumors (craniopharyngeoma, corpus callosum glioblastoma and high grade intracerebral glioma), vascular pathology (arteriovenous malformations, aneurysms), spontaneous intracerebral hemorrhage. Application of ultrasound neuronavigation system aids in improving postoperative outcomes for these patients.

Conclusion: The integration of 3D US with neuronavigation technology created an efficient and inexpensive tool for intraoperative imaging in neurosurgery. The technology has been applied to optimize surgery of brain tumors, but it has also been found to be useful in other procedures such as operations for aneurysms or arteriovenous malformations. iUS is easy to use and has a rapid learning curve which makes it a useful tool to the neurosurgeons intraoperative armamentarium.

Keywords: Neuronavigation, neurosurgery, intraoperative ultrasound, 3D US

66. MECHANICAL VENTILATION ASSOCIATED PNEUMONIA: THE IMPACT OF HOSPITAL MOBILITY AND MORTALITY IN THE PATIENTS WITH SEVERE CRANIAL AND CENTRAL NERVOUS SYSTEM INJURY

Popova Oxana

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Introduction: Ventilator associated pneumonia is one of the most frequent complication in mechanically ventilated critical patients from developing countries. The impact on morbidity, mortality and general treatment costs is undeniable.

Purpose and objectives: (1) To highlight the rate, risk factors, causative bacteria and their resistance to antibiotics, and (2) To estimate additional morbidity, mortality and treatment costs in patients with severe traumatic brain injury (STBI) with ventilator associate pneumonia (VAP).

Materials and methods: Were included all mechanically ventilated for more than 48 hours patients with STBI (n=253), admitted in Intensive Care Unit of National Scientific and Practical Center of Emergency Medicine during 2012 year. Registered parameters were: patient's comorbidities, potential risk factors for VAP, bacterial spectrum and resistance, and hospitalization costs.

Results: Almost a half of STBI patients who were ventilated for more than 48 hours developed VAP. Thirty-seven percents of them had left ventricular hypertrophy, 22% - arterial hypertension, 22% - ischemic heart disease, 19% - hepatitis.

Confirmed risk factors, that significantly increased VAP prevalence, were: hemodynamic instability, hypovolemia, severe bleeding, femur or tibia fracture, broken ribs, pleurisy, and pneumothorax. The bacterial agents causing VAP in study group where: *Acinetobacter* (25%), *Pseudomonas aeruginosa* (19%), *Streptococcus epidermidis* (17%), *Proteus mirabilis* (15%), *Klebsiella pneumoniae* (15%), *Enterococcus faecalis* (9%); all of them where antibiotic resistant. Length of stay in intensive care unit was: for STBI with VAP - 18 days vs. 12 days, in case of STBI without VAP. Hospitalization costs in VAP (+) group was three times higher. Registered extra-morbidity in STBI patients with VAP was 22%.

Conclusion: (1) VAP is caused by multi resistant to antibiotics nosocomial flora. (2) In STBI patients, VAP was associated with an important extra morbidity, extra mortality and costs of care. (3) Most of mentioned risk factors are manageable, so, VAP is a highly preventable nosology.

Keywords: severe traumatic brain injury, ventilator associated pneumonia, mortality

67. ADVANCES IN MULTIMODALITY TREATMENT OF CEREBRAL ANEURYSMS

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Background: The treatment of intracranial aneurysms has undergone a paradigm shift such that endovascular therapy has emerged as a viable treatment regimen. Thus, microsurgery techniques have become less invasive, more appealing to patients, lower risk, and efficacious for complex aneurysms, particularly those unfavorable for or failing endovascular therapy.

Methods: We reviewed literature and emphasized major modern techniques used in complex aneurysm treatment. Also we present several cases of minimal invasive supraorbital „keyhole” craniotomy, used in treatment of anterior circulation aneurysms and a case report of a giant cavernous carotid aneurysm resolved with an extra-intracranial high-flow bypass and trapping of parent vessel.

Results: Multimodality treatment of cerebral aneurysm provided by literature can be divided in two major groups: microsurgery and endovascular techniques. Microsurgery include: direct clip occlusion via a large or minimal invasive craniotomy, clip occlusion after coil extraction and bypass techniques; while endovascular techniques embrace: coiling, stent/balloon-assisted coiling and pipeline endovascular device flow diverter.

Conclusion: Contemporary management strategies should involve all aspects of neurovascular care, including neuroendovascular physicians, neurocritical care, and neuroanesthesia. All of these specialties

should be synergistic and complementary in their approach with the common goal of managing the obliteration of the aneurysm with minimal risk, both short-term and long-term, to the patient.

Keywords: aneurysm, clipping, endovascular techniques, bypass

68. ERECTILE DYSFUNCTION IN PATIENTS WITH NEUROLOGICAL DISORDERS

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Introduction: Erectile dysfunction (ED) is a common symptom in many neurologic diseases. This fact has led to the increasing involvement of the neurologists in the evaluation of ED.

Materials and Methods: 1. Bibliographic review on the topic: ED in patients with neurological disorders, - Ovid - 1995-2013, 40 selected sources, MedLine - 15 sources, HINARI - 20 sources; 2. Studying pathophysiological mechanisms of neurogenic ED; 3. Studying of medical cases of patients with neurological disorders and ED, in Neurology and Urology Clinics; 4. Evaluation of selected cases.

Results: The clinical case reported below, is to reveal the importance of the collaboration between andrologist and neurologist in managing a patient with neurologic ED. G. is a 38-year-old man first time to andrologist. He reports significant ED, progressed over the past few months, no spontaneous erections. Other complaints-back pain radiating to left leg, bilateral paresthesia. Symptoms started about 4 years ago. He consulted several urologists, and was diagnosed with chronic prostatitis and followed several treatments with transient temporary relief. Medical history- diagnosed with a herniated lumbar disc 5-6 mm - 2009, conservative treatment. Sexual history- single, stable sexual partner, psychological climate appropriate torque. SHIM questionnaire = 11 points (moderate ED). Physical examination - normal genitalia and prostate. Laboratory results- no abnormalities. Treatment recommendations - inhibitor PDE 5, with positive effect. But due to complaints of back pain radiating to left leg and bilateral paresthesia was recommended lumbar MRI - found discal herniation 18-20 mm. The patient was referred to neurosurgery for surgical treatment. After 6 months, he presented to andrologist for evaluation. SHIM questionnaire = 20 points - satisfactory sexual function with no PDE5 medication.

Conclusions: 1. The evaluation of ED causes needs a multidisciplinary cooperation between several specialists in urology, endocrinology, neurology, psychiatry, and others. 2. The reported clinical case shows the importance of right neurologic evaluation. And the professional treatment has resolved not only the neurological problem but the andrological problem.

Key words: Erectile Dysfunction, Neurological Disorder, SHIM

69. STATISTICAL AND CLINICAL ASPECTS OF GLAUCOMA IN THE NORTH OF THE REPUBLIC OF MOLDOVA

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Introduction: Glaucoma is a group of eye conditions resulting in optic nerve damage, which may cause loss of vision. It is one of the leading causes of blindness.

Objectives: To report on statistical and clinical aspects of glaucoma in the North of the Republic of Moldova, never studied before.

Materials and methods: A retrospective case series consisting of reviewing the medical notes of 518 patients (921 eyes) diagnosed with glaucoma in Bălţi Municipal Clinical Hospital P.H.A. covering the period 2009 to 2012. Patients were divided into 4 groups: 1st - patients with Primary Open - Angle Glaucoma (POAG), 2nd - Primary Angle - Closure Glaucoma (PACG), 3rd - Glaucoma Suspect (GS), 4th - Secondary Glaucoma (SG). t - Student test was used for statistical analysis of the results, if $p < 0,05$, then CI = 95%.

Results: During the study performed in the North of the Republic of Moldova it was revealed

that glaucoma represents 13%±0,58 of all patients with eye diseases. POAG is the most frequent type – 83,3%. The incidence of glaucoma rises with age. Women are at higher risks for PACG and GS. Significant attention should be given to patient's complaints: vision loss, blindness, periodic blurred vision, eye pain, tearing, photophobia, headache, or no complaints. Slit-lamp biomicroscopy showed: iris atrophy, corneal edema, rubeosis iridis in SG. Largest deviations from normal values at tonometry, visual acuity test and perimetry were detected in the patients with SG. Glaucomatous excavation is frequently seen in POAG eyes. Timolol was the most used medication in monotherapy; combination (Timololum + Pilocarpinum) + Dorzolamidum were often used in combined therapy. Common incisional surgery used in POAG and PCAG is Sinustrabeculectomy + Posterior Sclerotomy.

Conclusion: In frame of this study regarding statistical and clinical aspects of glaucoma realised in the North of the Republic of Moldova, the frequency, clinical manifestations and treatment of each type of glaucoma were demonstrated. The study shows a correlation between the obtained data and existing data in our country.

Keywords: Primary Open – Angle Glaucoma, Primary Angle – Closure Glaucoma, Glaucoma Suspect, Secondary Glaucoma, Bălți Municipal Clinical Hospital PHA

70. SEPTIC COMPLICATIONS OF HIP ARTHROPLASTY

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Introduction: Septic complications of hip arthroplasty present a complication that can be more critical than an infection. The incidence of this complications in Republic of Moldova is approximately 1-2 %.

Aim: We report 20 cases of infected hip arthroplasty.

Methods: This is a prospective and retrospective primary analysis of 20 patients, which were surgery-treated with hip arthroplasty in National Centre of Emergency Medicine, Chisinau, Moldova

Result: The age of the patients were between 63-81 years. All the patients were assigned depending on the type of prosthesis: 6 of them had hip cemented prosthesis, 12 of them had non-cemented prosthesis and 2 of them had cervicocefalic prosthesis. Depending on the detection of infection was find: acute infection 6 cases (first 4 weeks); chronic infection 11 cases (4 weeks) and 3 cases detected intraoperatively. Depending on the pathogen agent, in patients with acute infection was present: 3 cases Staphylococcus Aureus, 1 case of E. coli and 2 cases of P. aeruginosa. The treatment of patients with acute infections was: antibacterial therapy according to preoperative antibiogram, debridement and lavage, maintaining the implant and postoperative treatment for 6 weeks. The treatment of patients with chronic infection was: revision, debridement, lavage, removal of prosthetic components and antibiotic cement spacer and after 6 months-arthroplasty.

Conclusion: The treatment in septic complications of hip arthroplasty depends on the general condition of the patient (age, comorbidity, immune response), the chronicity of infection and the bacterial sensibility. Revision is the best solution to chronic infections with the use of an antibiotic cement spacer. Early diagnosis allows to make the best treatment.

71. CORRELATION OF ANTIOVARIAN ANTIBODIES AND INFERTILITY OF UNEXPLAINED ORIGIN

Zakutnii Taras

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Introduction: In the structure of infertile marriage the main place has still been kept by a tubal factor. Frequency of this infertility factor reaches 18-73%.

Purpose and Objectives: To determine the level of antiovarian antibodies in the blood of women with tubal infertility.

Materials and methods: A clinical-laboratory examination has been made of 109 women which were divided into 2 groups: 1 group (main) – 58 women with infertility of tubal origin; 2 group (control) – 51 women. Antiovarian antibodies were determined by means of immunofluorescent set made by the firm Bioserv Ovari-Antibodi ELISA for determination in the blood serum of autoantibodies directed against ovarian antigens.

Results: 30 women have been examined and divided in two groups in our study. The first group included 20 women with infertility of tubal origin. The second group consisted of 10 healthy women with a preserved reproductive function. The average age of women in the main group didn't differ from the women's age of the control group. Significant majority in the number of women with chronic salpingoophoritis in the main group (6 times more) testified to the possibility of autoimmune salpingoophoritis initiation in the group under study. Level of antiovarian antibodies was equal to $7,1 \pm 0,9$ and in the main group – $4,1 \pm 0,5$, which is 1,7 times less than in the control group.

Conclusions: (1) The level of antibodies in the main group of women under study and rise of the level have been determined in patients with a secondary infertility who didn't impregnate for more than 5 years and underwent the following surgery; tubectomy, cystectomy, adnexectomy. (2) On the contrary, the decreased level of antiovarian antibodies has been discovered in patients with a primary infertility that did not impregnate for 5 years as well as in women with uterine pathology and myoma.

Keywords: Antiovarian antibodies, infertility, salpingoophoritis

72. THE PRINCIPLES OF TREATMENT IN THE URETERAL STONES

Bors Anna

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Introduction and objectives: It hasn't been decided yet the place of modern (endoscopic, ESWL) and traditional methods of therapeutical treatment of ureteral stones. The aim of this study was to improve the treatment of ureteral stones with the creation of a therapeutic algorithm.

Material And Methods: In this study we analyzed a group of 325 patients with ureteral stones, treated in a conservative (47), endoscopic (65), surgical (71) and ESWL (142) way. Age range from 23 to 67 years old, with an average of 45 years. There were 173 (53,2%) females and 152 (46,8%) males. The stones were localized in 77 (23,8%) of cases – lumbar floor, in 50 (15,4%) of cases – iliacus, in 175 (54,0%) of cases – pelvic and in 22 (6,8%) of cases – intramural. The diameter of the stones ranged from 0,3 to 2,0 cm (3-20mm). The staying time for the stones in the ureters varied from 7 days to 2 years. Ten (4,7%) of the patients had ureteral catheter, 56 (28,0%) – had ureteral autostatic stent, 159 (75,0%) – ESWL, 13 (4,0%) percutaneous nephrostomy, 8 (1,5%) open nephrostomy, 72 (22,2%) – ureterolithotomy, 60 (18,5%) – ureteroscopy, meatotomy – 5 (1,5). The patients were followed up for a range of period from 3 months to 2 years. The analyzing criteria of the results were: success rate, fail number, complications and the way of their solving.

Results: We have studied the results of the ureteral stones treatment, which was a basis for creating a therapeutical algorithm, according to the size, localization and time of staying in ureter. A differential application of these therapeutic methods allows to improve considerably the data. The success rate was of 86,9%; complications were noted in 13,1% of cases.

Conclusions: The utilization of therapeutical algorithm allows to choose the optimal therapeutic method of treatment in ureteral stones.

Keywords: Ureteral stones, ESWL, complications

73. MODERN VIEWS IN THE ETIOPATHOGENESIS OF UROLITHIASIS

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Scope: Investigate the data and research about the contemporary aspects of the etiopathogenesis of retention and growth of urinary calculi.

Objectives: 1. To determine the uropathogenic factors involved in the formation of urinary calculi. 2. To analyze the susceptibility of the urinary tract in developing urolithiasis. 3. To investigate the relevant mechanism of retention and growth of urinary stones. 4. To determine the application of the theoretical mechanism of urolithiasis in practice.

Materials and methods: Analyzing studies based on radiologic methods such as endoscopy and computer-assisted microscopy to prove the formation of calculi on the Randall plaques and plugs in the lumen of the collecting ducts.

Conclusions: 1. Lithogenesis represents a succession of physicochemical events which imply the action of diverse factors in specific conditions. 2. Randall plaques is the most important factor in the pathogenesis of stone formation and their growth. 3. Plugs in the lumen of the collecting ducts represent an important pathogenetic factor in lithogenesis, moreover this is involved in the some forms of cortical diseases. 4. Distinguishing from the following types of stone formation and their growth mechanisms could contribute to the understanding of calculi formation.

Keywords: urolithiasis, Randall plaques, ductal plugs

74. STUDAY OF CONTEMPORARY LITERATURE ON THE TOPIC OF CONGENITAL BOWEL OBSTRUCTION

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Background: Neonatal intestinal obstruction (NIO) is one of the most common emergency conditions a paediatric surgeon is called upon to assess during the neonatal period. Successful management of NIO depends on timely diagnosis and referral for therapy.

Material of study: Intestinal obstructions are either intrinsic or extrinsic. Intrinsic lesions result from absent (atresia) or partial (stenosis) recanalization of the intestine. In cases of atresia, the two segments of the gut may be either completely separated or connected by a fibrous cord. In cases of stenosis, the lumen of the gut is narrowed or the two intestinal segments are separated by a septum with a central diaphragm. Apple-peel atresia is characterized by absence of a vast segment of the small bowel, which can include distal duodenum, the entire jejunum and proximal ileus. Extrinsic obstructions are caused by malrotation of the colon with volvulus, peritoneal bands, meconium ileus, and aganglionsis (Hirschsprung's disease). The most frequent site of small bowel obstruction is distal ileus (35%), followed by proximal jejunum (30%), distal jejunum (20%), proximal ileus (15%).

Result: Although the condition is usually sporadic, in multiple intestinal atresia, familial cases have been described. Associated abnormalities and chromosomal defects are rare. In contrast with anorectal atresia, associated defects such as genitourinary, vertebral, cardiovascular and gastrointestinal anomalies are found in about 80% of cases.

Conclusion: Infants with bowel obstruction typically present in the early neonatal period with symptoms of vomiting and abdominal distention. The prognosis is related to the gestational age at delivery, the presence of associated abnormalities and site of obstruction. In those born after 32 weeks with isolated obstruction requiring resection of only a short segment of bowel, survival is more than 95%. Loss of large segments of bowel can lead to short gut syndrome, which is a lethal condition.

75. GENITAL PROLAPSE

Butucel Tatiana

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Introduction: Genital prolapse is a common condition, affecting women of all ages. The global prevalence of genital prolapsed is estimated to be 2-20 % in women under age 45 years, but in our country is estimated 1,7-28 %. The prolapse risk factors include multiple vaginal deliveries, obstetrical trauma, age, obesity; hysterectomy, collagen quality and smoking. Genital prolapse occurs when the network of muscles, ligaments and skin that hold them in its correct anatomical position weaken. Genital prolapse can cause the following symptoms: heaviness or pulling in pelvis, tissue protruding from vagina, painful intercourse, pelvic pain and difficulties with urination and bowel movements.

Materials And Methods: The retrospective study is based on 102 patients with genital prolapse. The results was analyzed with Microsoft Excel and Stats Direct Statistical Software Version 1.9.5.

Results: Patients age was $57,93 \pm 1,008$ years. The patients was divide into two groups, the last one- 16 patients (15,69%) of women (<48 years), the second one-86 patients (84,31%) of women (>48 years). The average number of births to all women was $2,54 \pm 0,08$ ($p < 0,001$). The incidence of births at women with genital prolapse on the first group represent $15,68 \pm 3,60\%$, but at the second group is more frequently- $84,28 \pm 3,60\%$ ($p < 0,001$). The postoperative complications was in $5,88 \pm 2,32\%$ cases.

Conclusion: Incidence of genital prolapse is higher in older women, who have more than 48 years. It involves screening of old women to diagnose genital prolapse. Births represent one of the important causes of genital prolapse, observed mainly in old women.

Keywords: Genital prolapse, births, obstetrical trauma

76. DRY EYE SYNDROME IN PATIENTS WITH GLAUCOMA

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Purpose: Evaluation of the frequency of dry eye syndrome in patients with glaucoma.

Methods: The study included 50 patients, aged 45-75 years, hospitalized in the Clinic of Ophthalmology No.2, in July-December 2013, with the diagnosis of primary open angle glaucoma. Patients were examined at the slit lamp, with appreciation of LIPCOF, fluorescein staining, tear break-up time, Schirmer test.

Results: The Schirmer test was decreased in 69% of eyes: 30 eyes – with mild xerosis, 24 eyes – with moderate xerosis, 15 eyes – with severe xerosis. Thirty eyes were treated with beta-blockers, 46 eyes – with beta-blockers and prostaglandin analogues, 24 eyes – with prostaglandin analogues and inhibitors of carbonic anhydrase. Most dry eyes were recorded in the group treated with blockers and prostaglandins (78%), and in the group treated only with beta-blockers (73%). Thirty-eight eyes underwent surgery: the first group (26 eyes) – antiglaucoma filtering operations and the second group (12 eyes)– combined operations antiglaucoma filtering and cataract extraction. In the first group, the Schirmer test was lower in 23 eyes and TBUT in 20 eyes. In the second group - Schirmer reduced in 12 eyes, TBUT – in 10 eyes. Results of Schirmer tests and TBUT depend on the duration of hypotensive medication administration: less than 5 years -- xerosis in 63.33% cases, 5-10 years – in 78.13% cases, over 10 years – in 65.79% cases.

Conclusions: The results of our study show the existence of the dry eye syndrome in patients with glaucoma (69% of patients had DES). The presence and intensity of the dry eye syndrome depend on the medication administered (Schirmer and TBUT commonly reduced in patients treated with beta- blockers – 58%), surgical treatment applied (92.11% of eyes operated by an antiglaucoma filtering surgery presented DES and 100% of patients who supported a combined surgery) and duration of administration of antihypertensive medication.

Keywords: dry eye syndrome, glaucoma

77. VIRAL KERATITIS. DIAGNOSIS AND TREATMENT

Cucos Victoria

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Introduction: Herpes Simplex Virus (HSV) is a human virus spread worldwide. Today more than 90% of adults carry systemic antibodies to HSV-1. Herpetic keratitis is the most common form of the HSV eye disease, counting for 50% to 90% of ocular herpes. This is the leading cause of corneal blindness among developed countries and the most common indications for corneal transplant.

Purpose and objectives: To determine the diagnostic features and treatment outcomes for herpetic keratitis.

Materials and methods: all records of the patients diagnosed with herpetic keratitis from 2007 through 2013 at the Ophthalmological Department of Medical Centre "OVISUS" Chisinau, were retrospectively reviewed.

Results: The study revealed 30 patients diagnosed with herpetic keratitis from 2007 to 2013. The study group was consisted of 21 female (70%) with mean age $59,67 \pm 18,16$ and 9 male (30%) with mean age $50,56 \pm 16,71$. Evaluating the patients by age groups it is noticed an rising trend through young adults age 20-30, and another peak among elders age 71-80. Also patients showed comorbidities: hypertension-36,67%, diabetes-20%, diseases that affect immune system like viral respiratory infection-10%, HBV-10%, HCV-3,33%. The study group showed other ocular diseases: glaucoma-16,67%, cataract-10%, astigmatism-6,67%, myopia-6,67%, retinal degeneration-3,33%, macular dystrophy-3,33%, blepharitis-3,33%, pterygium-3,33%. The most common complaints recorded were: decreased visual acuity-93,33%, tearing-83,33%, photophobia-70%, ocular pain, conjunctival injection-66,67%, blepharospasm-33,33%. Ocular examination revealed the following manifestations of keratitis: herpetic epithelial keratitis-20%, herpetic stromal keratitis-20%, herpetic keratouveitis-33,33%, herpetic corneal ulcer-26,67%. Surgical treatment was performed on 30% of patients with an increase of visual acuity for 33,33% of patients. Overall 70% of patients required: antiviral medication, topical antibiotics, immunomodulatory drugs, topical steroids and also showed a significantly greater improvement in visual acuity for 33,33% patients.

Conclusion: Current data suggest that herpetic keratitis affects more women than men, patients with decreased immunity, and both surgical treatment and medication therapy have a better outcome with an increased visual acuity.

Keywords: Herpes simplex virus, herpetic keratitis

78. DIAGNOSIS AND TREATMENT OF THE CENTRAL TYPE OF SLEEP APNEA SYNDROME

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Introduction: The diagnosis and treatment of sleep disorders require special attention because they can have serious psycho-behavioral, cardiovascular, metabolic consequences and can influence the intellectual performance and social relationships. The central type of sleep apnea syndrome represents a set of signs and symptoms caused by stops (apnea) or slow downs (hypopnea) of respiratory flow during sleep caused by central nervous system disorders (respiratory center) with a frequency of more than 5 episodes per hour and lasting more than 10 seconds. Considering the consequences it has on the body, the SAS diagnosed patient requires a multidisciplinary approach: ENT, pneumology, neurology, cardiology, psychiatry.

Materials and Methods: Relevant articles on the topic for the period from 2000 to 2014 were analysed, using PubMed data base and other sources. The following key words: sleep disorders, sleep apnea, central type of apnea.

Results: The central type of sleep apnea syndrome is found more often in patients with heart

failure, of which 20-30% at the patients with systolic heart failure. 10% of all patients with sleep apnea syndrome, registered at the study of sleep laboratories, present central type of apnea. (PSG) is the most informative and base method in diagnosis of sleep apnea, fact confirmed by practice. The best method of treatment has proved CPAP-therapy (continuous positive airway pressure). In the modern treatment is used auto-CPAP-therapy witch allows automatic recording and dosing of the inspired air flow.

Conclusion: We determined the following aspects:

- 1) The central type of sleep apnea syndrome is very dangerous to patients lifes caused by the mechanism of production and more complications after hypoxia
- 2) Polysomnography represents the screening of the central type of sleep apnea syndrome
- 3) Auto-CPAP-therapy and CPAP-therapy are the most effective methods of treatment

Keywords: sleep apnea syndrome

79. RETROSPECTIVE STUDY CONCEARNING THE RISK FACTORS, CAUSES, TYPE OF BIRTH INDICATIONS AND COMPARATIVE ANALYSIS OF COMPLICATIONS IN CASE OF BREECH PRESENTATION OF SINGLE FETUS AT TERM

Fala Paula, Gheorghiu Cristina

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Introduction: For 3-4% of pregnancies, the fetus will be in breech presentation at term. For most of these women, the approach to delivery is controversial.

Purpose and objectives:

- Identifying the causes that may lead to a higher rate of pregnancies with breech babies at term;
- Highlighting the most frequent complications during pregnancy with breech presented babies;
- Comparing natural delivery with caesarian birth and concluding witch way is safer for these particular cases.

Materials and methods: The study is based on 46 pregnant women out of 1777, which is the total number of births for 2013 at the *PI Municipal Maternity Nb.2*. We did a retrospective trial, based on their clinical observation sheets, in order to determine which are the most common causes that may lead to this form of presentation and what the evolution of the pregnancy was. Also, we compared the policy of planned caesarean section with a policy of planned vaginal delivery and the complications occurred during and 5 days after birth for selected breech-presentation pregnancies.

Results:Data was received for 46 women out of a total of 1777 women, which represents 2.6%. 84.78% women assigned caesarian section, among which 15.38% were planned (66.67% - primiparous and 33.33% multiparous) and 84.62% were emergencies (63.63% - primiparous, 36.37% - multiparous). 15.22% assigned planned vaginal birth (42.86% - primiparous, 57.14% - multiparous). Out of the total number of breech births cases, 60.87% were primiparous, and 39.13% were multiparous. The identified complications during and after natural birth were: dynamic dystocia (hypokinetic and hypotonic) – 14.29% and hemorrhage – 14.29%; during and after caesarian delivery there has been one case with complication (hemorrhage) -2.56%. Out of the most common causes described in literature, the following causes have been revealed in our study: bicornate uterus - 2.17%, oligoamnios- 4.35%, hidramnios - 2.17%, fetal-placental insufficiency - 4.35%, macrosome fetus - 6.52%. The relative risk – the risk to develop complications during natural birth is 28,5 times higher than that for caesarian section.

Conclusion:

- The most common conditions that led to breech presentation at term are: bicornate uterus, oligoamnios, hidramnios, fetal-placental insufficiency and macrosomy;
- The most frequent complications during delivery are dynamic dystocia and hemorrhage, both in case of vaginal delivery;
- These results led us to the conclusion that planned caesarean section is safer than planned vaginal birth for fetus at term in breech presentation;

• There were no differences between groups in terms of maternal mortality or serious maternal morbidity;

Keywords: Breech presentation; risk factors; caesarian section; natural delivery

80. MODS IN CHILDREN AFTER CARDIAC SURGERY WITH EXTRACORPOREAL CIRCULATION

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Introduction: Cardiac surgery with extracorporeal circulation (ECC) is associated with systemic inflammatory response (SIRS) that can evolve up to multiple organ dysfunction syndrome (MODS) and death. Children are at increased risk of developing MODS, due to the particularities related to ECC and immature organ systems. The mortality is directly correlated to the number of failed organ systems: 30-40% if one organ system fails, 50-60% if two organ systems fail and 80-100% when three or more organ systems fail.

Purpose and Objectives: Determination of incidence and mortality of MODS in children after cardiac surgery and particularity analysis of the organ insufficiencies.

Materials and Methods: From 421 children undergoing various cardiac surgeries during the period 2010-2013, treated in the department of cardiac Intensive Care of Republican Clinical Hospital Chisinau, were selected 16 (3.8%) children who developed MODS background of SIRS, with or without subsequent association of sepsis. The diagnosis was confirmed by clinical and explorative complex criteria.

Results: Average age of patients was 21.95 months, of which: under 1 year - 8 (50%), from 1 to 3 years - 6 (37.5%), from 3 to 6 years - 2 (12.5%) children, respectively. There was a predominance of girls (10 girls versus 6 boys). Respiratory failure was developed in 15 (93.7%) patients. The average duration of artificial ventilation was 8.87 +/- 6.95 days, statistical significant difference between the duration of artificial ventilation in patients treated and died were not been determined. Malabsorption syndrome, paresis associated with intestinal failure was determined in 12 (75%) patients. The renal system was involved in 14 (87.5%) patients, 7 (43.75%) show signs of acute kidney injury, and 6 (37.5%) develop acute renal failure. Cerebral insufficiency was found to be in 9 (56.25%) patients, systemic intravascular coagulation syndrome in 5 (31.25%) patients. In 5 (31.25%) patients with MODS the sepsis was associated, confirmed by positive blood cultures and procalcitonin >10 ng/ml.

Conclusions: Mortality of children with MODS was the 37.5% (6 children) correlated to the number of affected systems, often developed into respiratory failure, gastrointestinal, cerebral and renal. Statistical differences between ECC duration and aorta clamping in deceased patients and MODS treated were not been determined.

Keywords: children, MODS, cardiac surgery

81. SCREENING FOR RONCOPATHY OF POPULATION FROM CENTRAL REGIONS OF RM

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Introduction: The well known fact is that healthy dream is the necessary component of human emotional part. The dream's quality is influenced by the number of reasons, of which the most important is derangement of passing of air flow threw the narrowed respiratory airways which leads to the phenomenon called "Roncopathy". The problem of this phenomenon and the association with it of sleep apnea remains an actual problem not only at otorhinolaryngology domain, and has a lot of consequences which influence the everyday life quality, needs the involvement of specialists from

almost all domains as: surgeons, sexologists, etc. A small number of scientific researches are dedicated to this problem, which involves a reduced number of populations and doesn't reflect the entire seriousness of this problem. A number of screenings concerning roncopathy have been already done in EU and USA and special associations were founded. Such organization doesn't exist in the RM, only tendency to highlight the seriousness of this problem threw the screening that was performed in 2008 by Olaru A. and associate professor Gagauz A. That is why we decided to tackle deeper this pathology, which isn't seen as a problem; and to observe how well the members of society know themselves threw screening of population from central regions of RM, performed in period October 2013-February 2014.

Materials and methods: during this screening 2010 persons were questioned, between 17-78 years old. We record a questionnaire with 34 questions, and used centimeter band.

Results: The number of those who snores is continuously decreasing with age. The highest incidence of roncopathy is between 46-65 years old. The highest incidence of sleep apnea is between 61-65 years old. The oldest man who doesn't snore is 72 years old. From the totally number of those who snore the highest incidence is among drivers. The majority of women snore lying on the back. Usually people snore in 1 or 3 positions, and rarely in 2. All people who snores 68,97% have increased BMI. The majority of women and men snore from 6 to 10 years. 39,8% from affected people are smoking, among them 12,19%. 42,71% from those who snores eat a lot before going to bed, among them women 31,81%. Men more frequently supported cranial trauma (18,44%). 83,8% from all patients with sleep apnea are men. Urban men snore more frequently. The incidence of high blood pressure is 35,92% and is almost the same between male and female.

Conclusion: We investigate the roncopathy as a social problem in RM, with more persons and criteria. The most affected are those whose BMI is increased, with otorhinolaryngological pathology and male gender.

Keywords: Incidence, roncopathy, sleep apnea

82. OSTEOPOROSIS IN MEN

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Introduction: Osteoporosis is a disease characterized by low bone mass, deterioration of bone tissue and skeletal fragility consistent with increased risk of fracture. It is a chronic multifactorial disease complex that often develops silently for decades until fractures occur not characteristic. It is shown that there are over 150mln people suffering from this disease. 20% of all osteoporosis cases occur in men.

Purpose and Objectives: Clinical-study, indices DXA and FRAX score in men with osteoporosis.

Materials and Methods: We performed a study of 40 men > 50 years, hospitalized in Department of Rheumatology and Arthrology of Republican Clinical Hospital.

Results: We found that 55 % of men had osteopenia and 45% , osteoporosis. Men using glucocorticoids have a much lower bone density (T-score -3.1) than men not receiving glucocorticoids (T score -1.7) . Observed with age and decrease T score so persons aged 50-60 years had the mean T score of -1.9 compared with men aged 60-70 years in the T-score was -2.4 and much higher compared with age > 70 years at the T-score was significantly lower (-3.2) compared with men with a BMI of 50-69 ani. Men with BMI <20 T-score was -3,31 compared with -2.1 at BMI > 20. Men with a rational as > 950 mg / day T-score was -1.75 , and the second group (by rational Like 850-950mg/zi) T-score was -2.05 . The third group of men who have the smallest rational Ca, about 750-850 mg / day , are most prone to pathological fracture because their T-score is -3.15 . Male smokers had T-score lower than non-smokers , so the T-score at smokers was -2.64 and non-smokers was -2.36.

Conclusions: Osteoporoză emerged as nosologic unit is very frequently detected in RM even in men of working age. In disease development were presented with high frequency following risk factors: age, smoking, BMI, corticosteroid, intake reduced Ca.

83. ASYMMETRIC LOADING OF LOWER LIMBS AS AN EARLY INDICATOR OF SPINE DEFORMITIES

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Introduction: Disorders of musculoskeletal system in the process of growth and development of the child's body are dangerous because they are likely to be irreversible if not timely detected. That's why it is important to diagnose them in time and do everything possible to minimize the health harm. Incorrect posture and scoliosis are widespread pathologies in children and adolescents. Untreated they may lead to respiratory and cardiac disfunctions, huge cosmetic defects, psychological disorders. The method of determining the load of both legs can be used for early diagnosis of spine deformities. It identifies biomechanical asymmetry parameters before the onset of visible changes in the spine.

Materials and methods: Loading of the lower extremities was examined in 56 children aged 7-12 years (32 girls and 24 boys) during school spinal screening. We used floor scales embedded in a special support being on one level. The body mass was weighted, then degree of the foothold of the lower limbs was determined in statics. Measurements were carried out separately for the left and right leg.

Results: The children were divided in two groups. In the first group (n = 36) the difference in the loading of the legs was up to 10% that was considered as normal. There were no pathological findings during the orthopedic examination of the spine in this group. In the second group (n = 20), the difference was more than 10%. Children had poor posture (round back, hunch back, flat back, scoliotic posture, etc.). These deviations were combined with some kinds of bone disorders of the lower limbs (n=13) congenital hip dysplasia, knee deformations, and different types of foot pathology (flat feet, flat-valgus, flattened arch). Analysis of school health records showed that seven children hadn't problems with the musculoskeletal system, but at the time of the examination they presented incorrect posture.

Conclusions: The method of determining the load of both legs is very simple, cheap and non dangerous, it can used for early diagnosis of spine deformities in children. Pupils with the differences in the loading of the legs more than 10% were included in the group of risk due to incorrect posture and the high probability of scoliosis. Definitive diagnosis of spine deformities in the development of the musculoskeletal system requires a more careful examination.

Keywords: Asymmetric loading, lower limbs, incorrect posture, scoliosis.

84. THE PHENOMENON OF UNEXPECTED BIRTH AND ANALYSIS OF ITS CAUSES, CONDITIONS, COMPLICATIONS AND RESOLUTIONS IN CLINICAL HOSPITAL NR 1, CHIŞINĂU, REPUBLIC OF MOLDOVA

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Introduction: The unexpected delivery at home is a rare case but represents a particular situation, emotionally charged and often anxiety. First two previously in good health concerned, on the other hand, the prehospital care not are exceptionally familiar with this situation. Medicine of Reproductive Health is unanimously recognized by the international community as a public health problem by first intention. Worldwide daily record is 536 000 of maternal deaths, or about one maternal death every minute, 30 cases of severe maternal morbidity correspond to each maternal death. Also, 3 million neonatal deaths, 3 million stillborn and yearly, 10 million women that as a result of birth will survive, but with complications, some with definitive repercussions on their social life and family.

Although it is expected that 90% of world population was born into medical institutions,

indices of maternal and fetal mortality and morbidity, relating to births outside health facilities, hierarchy are included in the first five root causes of these pathologies.

Results: In the study, we examined cases of unexpected births in Clinical Municipal Hospital Nr.1, during the period 2011-2013 (in 2011 were 8300 births, of which 22 unexpected births (0,27 %); in 2012 – 8400 births, of which 35 unexpected births (0,42 %) and in 2013 - 8450 births, 36 unexpected births (0,43 %)) analyzing the causes, major complications, ongoing process and subsequent health of mother and child.

Conclusions: (1) Unplanned births phenomenon remains an actual topic of discussion and research since the incidence of the phenomenon is slowly growing and there are no large studies in this chapter. (2) Poor socio-economic conditions and ineffective health education of the population remain the main causes of this phenomenon. (3) Rates of complications and consequences for mother and child certainly remain frequent ($p < 0.0001 - 0.03$) among unexpected births compared with normal births occurring in maternity. (4) At the moment there are no clear criteria of approach for the physician arrived unexpected in the room where the unplanned birth occurs. (5) Considering the risk for mother and baby, unplanned birth represents a real danger to maternal and child health, tending to rise steadily maternal and fetal morbidity and mortality rate.

Keywords: Unexpected birth, maternal mortality, fetal mortality

85. ETIOLOGY AND OUTCOME OF PEDIATRIC BURNS

Nabari Yasser

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Introduction: Burn injury in children continues to be a major epidemiologic problem around the globe. Nearly a fourth of all burn injuries occur in children under the age of 16, of whom the majority are under the age of five. Most burn injuries are minor and do not necessitate hospital admission.

Materials and Methods: In a retrospective and prospective study of 156 patients aged 0-18 years with thermal burns, grade I, II, IIIAB and IV hospitalized for burns over two years period (2012-2013) patients characteristics, circumstances of burn injury and prevalence of established predisposing factors were determined, in burn department of the Institute of Mother and Child and the Intensive Care Unit in Chisinau.

Results: High frequency of thermal burns injuries in children in the age group 1-5 years due to the high physical activity with relatively poor motor coordination (66.93%). Boys (59.5%) may have a high prevalence of burn accidents in comparison with girls (40.5%). Because boys more an active and troublemaker than girls. 59% percent of the children's injuries were scalds, with 71 percent of those caused by hot liquids and 29 percent caused by hot food. In 84,74% of burn injuries in children were hospitalized. According to the data 45.5% of the patients their admission are in the first 6 hours after exposure to burn injury and so about 20.51% of the patient arrive after 72 hours. Most of the patients were hospitalized with mild injuries (40.47%) and that due to early hospitalization of the patient.

Conclusions: Research found that the frequency burns in children up to 18 years is on rise in recent years. The predominant etiologic factor structure are scald injury (58.99%) and superficial burns predominate among clinical forms (51.04%).

Keywords: thermal burns, children, surgical outcomes

86. PARTICULARITIES OF SURGICAL TREATMENT IN SENILE CATARACT

Preguza Ala, Pregruza Ion

Background: The number of persons with senile cataract is continuously increasing, that's why, actually, surgery techniques have become less invasive, more appealing to patients, lower risk, and efficacious in treatment. Phacoemulsification (Phaco) and extracapsular cataract extraction (EEC) are basic methods in cataract surgery, and are used widely worldwide.

Methods: We reviewed literature and emphasized major modern techniques used in cataract surgery. Also we present our comparative study of phacoemulsification and extracapsular extraction on a representative group of patients. We compare subgroups (treated by Phaco and EEC) using the following comparative criteria: age, residence, place of work, days of hospitalization, visual recovery and outcome after surgery, complications etc. Data were analyzed using modern statistical tools and have passed veracity tests (t-student criteria).

Results: Patients that underwent Phaco tend to have a shorter period of hospitalization, recover more quickly their visual performances, have fewer complications and in the end have a better outcome.

Conclusion: Contemporary management strategies should give to the patients the chance to choose and to be treated by best method. Phacoemulsification appears to be the gold standard in actual management of senile cataract. Thus we should inform patients and primary medicines that early diagnostic and treatment is mandatory for the best outcome.

Keywords: cataract, phacoemulsification, extracapsular extraction

87. THE ROLE OF NITRIC OXIDE IN THE CLINICAL EVOLUTION OF THERMAL BURNS IN CHILDREN

Prisacaru Olesea

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Introduction: Nitric oxide (NO^-) plays an important role in sepsis and polytrauma. The study shows that in thermal burns NO^- is increased.

Materials and Methods: Burns, Reconstructive Plastic Surgery Department, Institute of Mother and Child, Department of Surgery, orthopedics and pediatric anesthesiology of IP SMPhU, "Nicholae Testemitanu", the Laboratory of Biochemistry of IP SMPhU, "Nicholae Testemitanu". In the study were included patients aged 0-5 years, with thermal burns of II, IIIA-B, IV degree. Burn area was more than 10 % TBSA.

Results: In this research, a statistically reliable increase in the concentration of NO^- at all stages of clinical evolution in children with thermal burns was demonstrated: in the toxemia phase - by 41 %, after surgery - by 54 % compared with control group. This reflects a vascular hypoactivity, myocardial dysfunction, the need for specific fluid resuscitation, inotropic therapy to improve oxygenation as well as an adequate analgesia and acid-base resuscitation.

Conclusions: These data suggest that during the shock, in children with thermal burns, there is an increased level of NO^- caused by gram-positive and gram-negative bacteria, which have been identified in patients in the study. Also, the formation of large amounts of NO^- in the smooth muscles of blood vessels causes vascular hypoactivity (vasoplegia) to exogenous and endogenous vasoconstrictor agents. We conclude that our research suggests that NO^- is a central mediator of hemodynamic disbalances in burn shock.

Keywords: nitric oxide, thermal burns, children, burn shock

88. CHANGES IN SERUM TRANSFERRIN LEVEL IN THE CLINICAL COURSE OF THERMAL BURNS

Prisacaru Olesea

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Introduction: Patients with severe burns present major multisystem pathophysiological changes. Pathophysiological imbalances include severe hypovolemia secondary to plasma loss, hypermetabolism and immune dysfunction. It is associated with septic complications, multiple organ failure syndrome, with triggers the systemic inflammatory response and infection. The uncontrolled development of these phenomena can lead to MSOF and, in some cases, to death.

Materials and Methods: The study group consisted of 40 patients with thermal burns which were in treatment in the Burns, Reconstructive Plastic Surgery Department, Institute of Mother and Child, Department of Surgery, orthopedics and pediatric anesthesiology of IP SMPHU, "Nicolae Testemițanu".

Results: Our study demonstrated that children with burn disease, presented an increased serum transferrin level at all stages of clinical course of the disease, but only the values recorded on admission, during the toxemia and on discharge were statistically relevant (+9 % compared to control group, $p < 0.05$). Increased transferrin level can be seen as a response reaction to thermal injury, which contributes to increase the nonspecific resistance of the organism. It is proved that the physiological role of transferrin is essential for the activation of the iron transportation cell renewal and proliferation, the stimulation of iron - containing hemic proteins synthesis, particularly the ribonucleotidreductaza - enzyme which catalyzes deoxiribonucleotide synthesis and controls the cell DNA synthesis.

Conclusions: We concluded that increasing transferrin can be seen as a reaction in response to thermal injury and to the decrease the antimicrobial defense mechanisms, represented also by neutropenia, as circulating neutrophils are responsible for removing bacteria from the bloodstream.

Key words: thermal burns, burn disease, children, transferring

89. THE STATUS OF LIPID PEROXIDATION IN PATIENTS WITH THERMAL INJURY

Prisacaru Olesea

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Introduction: The role of lipid peroxidation in children aged 0-5 with thermal burns has been and remains an important issue. Currently, there is no scientifically substantiated approach in the evaluation of the oxidation state of lipid peroxidation in the wound and the influence of therapeutic remedies for the topical treatment on these processes as well as the effectiveness of preparations used in the topical treatment of wounds in patients with burns and its consequences.

Materials and Methods: The study group includes 40 children aged 0-5 years with thermal burns, who were treated in burn and reparative plastic surgery department, Institute of Mother and Child, Department of Surgery, Orthopedics and Pediatric Anesthesiology IP SMPHU, "Nicolae Testemițanu". Criteria for admission of patients in the study group were: (1) age of children (0-5 years); (2) admission later than 72 hours after the accident; (3) The thermal injury as the cause of admission; (4) Burn surface greater than 10 % of TBSA or burn located in shocking areas; (5) The depth of burn - II , IIIA , IIIB and IV degree.

Results: The study results demonstrate the presence of true changes in the concentration of the non-polar, hydrophobic (hexane phase) products of lipid peroxidation at all stages of clinical course of thermal injury. Our research revealed increases in the concentration of early HPL and HPL - intermediate polar hexane phase at all stages of clinical course of the disease. The late HPL level has not changed, except on the admission, which established a conclusive statistical decrease in values. Research confirms the causal role of O_2 radicals in the mechanism of cell destruction in thermal burns in children.

Conclusions: In the context of the changes mentioned, we can say that oxygen free radicals are very important cellular mediators of tissue injury occurrence, resulting in organ dysfunction, that in some patients - may be irreversible and even lead to death as a result of microcirculation changes and cell necrosis progress, which are already affected by heat. The level of systems and organ disorders is influenced not only by the severity of the trauma, but also by a complex, multimodal treatment.

Keywords: lipid peroxidation, oxygen free radicals, thermal injury

90. EPIDEMIOLOGICAL, CLINICAL FEATURES AND RISK FACTORS IN FAILURE TO PROGRESS

Rodoman Iulia

The purpose: The aim of this work is to analyze risk factors, epidemiological and clinical features in failure to progress.

The objectives:

- Evaluation of the epidemiological aspects in failure to progress.
- Evaluation of the risk factors for the failure to progress.
- Evaluation of delivery progress, postnatal and neonatal periods in failure to progress.

Materials and Methods: This work is a retrospective study in which we used the following series of survey methods: sampling data from medical documents, statistics and mathematical analysis of the results. The material was collected in Chisinau Maternity IMSP SCM nr. 1. To implement the objectives of this work we studied the process of delivery, postpartum and neonatal periods in 5306 childbirth stories. From 5306 clinical cases studied were selected 368 labor histories, among which 184 - all the clinical cases of childbirth complicated by the failure to progress (contains 3.5%), which compose a workgroup. For comparison, we have selected 184 clinical cases with physiological parturition in the control group. Information derived from labor histories with particularities in anamnesis, pregnancy, delivery process were registered in a specially questionnaire.

Conclusions:

1. The failure to progress occurs with a frequency of 3.5% (293 cases out of 8336). During our research, we found that the frequency of the weakness of labor depends on the following factors: age (more prevalent among 21-30 age), weight (obesity increases the risk of failure to progress in 2.3 times) and smoking (increased risk of failure to progress in 3 times).

2. The following predominant risk factors were revealed in our study: extragenital diseases (RR-relative risk= 2.44), especially endocrine (RR = 3), urogenital (RR = 3), cardiovascular pathology (RR = 3), gynecological diseases (RR = 4.2) in history, especially vulvovaginitis (RR = 2.3), vaginitis (RR = 2.6). It was found in our study, that nulliparous women 21-30 years have the risk of failure to progress increased by 1.5 times. Increasing the duration of pregnancy (RR = 2.4), presence of abortion in anamnesis, pathology of amniotic fluid, especially meconium (RR = 4.6) are also risk factors which in our opinion can lead to failure to progress.

3. There are 102 (55.4%) cases of cesarean section in work group. 134 (72.8%) women has received Oxytocin and 50 (27.2%) women had urgent indications for caesarean section. 62 (33.7%) received oxytocin finished by caesarean section. The remaining 72 (39.1%) women gave birth naturally. The complications in progress to failure are associated with a weak tone of the uterus, low tendency to involution and high tendency to bleed. Thus, the most frequent complication of postpartum are: hemorrhage (RR = 4), endometritis (RR = 5), the remnants of placental tissue (RR = 2.4) and postoperative complications (RR = 3). Increasing the duration of dry periods and pathological changes of amniotic fluid affect the neonatal period: increasing number of children with hypoxia (RR = 4) and posthypoxic encephalopathy (RR = 1.5).

91. INFANTILE HYPERTROPHIC PYLORIC STENOSIS

Said Said

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Introduction: The pyloric muscle is a sphincter defining the transition between the stomach and duodenum, it control the outflow from the stomach preventing passage of large pieces of food to the duodenum, and to prevent backflow of intestinal content to the stomach. Infantile hypertrophic pyloric stenosis (IHPS) is familiar to most pediatric and general practitioners. There is hypertrophy and hyperplasia of the antropyloric portion of the stomach, which becomes abnormally thickened, it manifests as obstruction to gastric emptying.

Purpose and Objectives: Highlighting the etiology, clinical manifestation, diagnosis and surgical treatment in hypertrophic pyloric stenosis behalf of the literature and case report, comparing open versus laparoscopic procedure.

Materials and methods: The project is based on 20 articles and 5 published case report regarding hypertrophic pyloric stenosis, one patient case study.

Results: the etiological factor for infantile hypertrophic pyloric stenosis remain idiopathic, with new risk factor erythromycin that will bind to motilin receptors directly on smooth muscle and cause contraction of pyloric bulb in addition to other risk factor like maternal smoking, and bottle feed. Infants with IHPS are clinically normal at birth, but they develop a nonbilious forceful vomiting during the first weeks of postnatal life, which is described as "projectile", if the child remain without treatment it will cause dehydration symptoms. The clinical diagnosis hinges on palpation of the thickened pylorus "straightforward after palpation of the olive sign in lateral rectus abdomens muscle after feeding the child" and the best alternative method is ultrasound of abdomen due to little cost and effectiveness. The treatment is surgical with two main method open pyloromyotomy ramstedt procedure or laparoscopic pyloromyotomy procedure.

Conclusion: The laparoscopic pyloromyotomy is more effective with less complication and faster time recovery with minimal scar tissue, the progressive is excellent normally without complication.

Keywords: hypertrophic pyloric stenosis, laparoscopic pyloromyotomy, ramstedt procedure, motilin receptors, erythromycin

92. POSTOPERATIVE COGNITIVE DYSFUNCTION IN PATIENTS AFTER LAPAROSCOPIC CHOLECYSTECTOMY

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Introduction:

Postoperative cognitive dysfunction (POCD) is characterized by deterioration of cognitive performance (memory, learning, concentration), which appears after anaesthesia and surgery. POCD is insufficiently studied after minimally invasive cellioscopic interventions.

Objective of the study:

To evaluate the postoperative cognitive status at the 7-th day after cellioscopic colecystectomy.

Materials and methods:

Intravenous-inhalatory anaesthesia (propofol, fentanil, and sevoflurane or isoflurane). EC approved and written informed consent obtained. Neurocognitive testing (n= 126, age: 46 [18-65] years) at 24 hours preoperatively and postoperative at 7-th day. Used tests: mini mental status (MMS), digit span test (DST), digit connection test (DCT), digit symbol substitution test (DSST) and Reedley colour stroop test (RCST). Statistics: t-Student and Wilcoxon.

Results:

MMS: 28,47 (95CI 28,08–28,86) vs. 28,79 (95CI 28,44–29,13), p=0,206. DST: 9,85 (95CI 9,46–10,23) vs. 9,96 (95CI 9,54–10,39), p=0,76. DCT: 37,82 (95CI 35,17–40,48) vs. 33,34 (95CI 30,76–35,92), p<0,0001. DSST: 36,86 (95CI 34,73–38, 98) vs. 39,75 (95CI 37,38–42,12), p<0,0001. RCST: 18,37 (95CI 16,85–19, 88) vs. 16,79 (95CI 15,01–18,57), p=0,008. Conclusions: (1) Cognitive function in patients undergoing cellioscopic cholecystectomy with balanced anesthesia seems to be affected one week postoperatively. (2) It remains to be established whether the changes found could be defined as "POCD", and if they have any impact on the quality of patient's life.

93. LACRIMAL TRACT DISEASES: DACRYOCYSTITIS TO ADULTS AND CHILDREN**Cristina Slobozean***Academic adviser: Vladimir Boișteanu, M.D., Ph.D., State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova*

Introduction: The disease has a slow onset and develops as a result of total obturation of the canal lacrimo nasal inflammatory processes caused the nasal cavity, the ethmoid region of the nose and other injuries. Chronic dacryocystitis is detected predominantly to women (5:1) and meets the young age between 30-45 years, the channel is narrower by about 2 mm. Due to technical and scientific progress would not actually in the literature are several techniques, methods of diagnosing and restoring nasal drainage lacrimo both drug - conservative as well as surgical , each with advantages and disadvantages. Lacrimal tract pathology has a negative impact not referring to the cosmetic, and socioeconomic, for it is a limitation in obtaining jobs as: drivers, soldiers, surgeons, pilots, teachers, etc. Another importance for studying the pathology is that muco-purulent secretion removal of lacrimal bag conjunctival cavity can cause chronic conjunctivitis that leads to ulcer development cornean. According to the literature, purulent dacryocystitis can cause purulent corneal ulcer in patients 40-50 a 100 patients. This ulcers are a danger to vision , representing the most frequent cause of corneal leucomului formation Dacryocystitis early detection and diagnosis , treatment and recovery of patients with lacrimal tract pathology requiring medical and social importance, although according to the literature and clinical practice , diagnosis and treatment of lacrimal disorders are largely successful, but it requires permanent to ophthalmologists great attention because complications arise which can not be resolved until the end.

Materials and methodes: In this study was analysed relevant articles on the topic, using PubMed, Hinari data base and other internet and literary sources. The study was conducted on a group of 24 pacients adults and 10 pacients children with dacryocystitis complication of Ophthalmologists clinic for the period of 1 year (2012-2013). Data were processed using computer programs Microsoft Word, Excel, Stats Direct Statistical Software Version 1,9,5.

Results: Patient age was between 30-75 years and 4-7 mounths for children and average of 50(±1,98). 8%(2) of them were males and 92% (22) were women and 30%(3) of them were males and 70%(7) of them were girls for statistic of the children. Symptoms of complications was hiperlacrimation (100%).

Conclusions: (1) Drug method is a noninvasive method and probing combined with nasal lacrimo gated channel is advantageous simplicity and efficiency which enables disappearance muco-purulent secretion and restoring patency naso - lacrimal. (2) Method modified by us ophtalmologic USMF, "Nicolae Testemitanu " has an advantage that can be considered as an alternative process, because it can be used in outpatient. Recidivism data treatment method dacriocistitelor chronic, resulting from age and disease diagnosis and treatment prior wrong. (3) The method used by us is physiological, providing anatomical route, providing training horses aesthetic that leaves no visible scar on the skin. (4) The advantage of the method consists of applying drug in patients with different pathologies that have a contraindicatiee General Surgery dacryocystitis.

94. CORALIFORM STONES. ASPECTS OF ETIOLOGY, CLINICAL AND TREATMENT. (REWLITERARY)**Sirghi Grigore***Academic adviser: Ceban Emil, M.D., Ph.D., State of Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova*

Introduction: Urolithiasis occupies a prominent place in the structure of urological diseases, due to its relatively high incidence, frequent relapses and adverse consequences for the kidneys that it can cause. Patients with urolithiasis is 25 to 41.5% of all hospitalized patients to specialized departments of urology. Coraliform stones are defined by the presence of renal concretions which occupies the entire basin and at least two calyces. It is a private entity, well defined by etiology, forms of presentation, clinical course, treatment methods and therapeutic outcomes.

Purpose and Objectives: Studying extensive literature on the etiology and pathogenesis of urinary stones, highlight and describe the clinical picture and treatment of coralliform gallstones. Elucidation of the clinical case of kidney coralliform stones and treatment methods used.

Material and methods: They examined the new data from the literature on etiopathogenesis, clinical and treatment coralliform stones. the clinical case of a patient hospitalized in the Department of Urology and Nephrology SCR and treatment was examined.

Results: According to the epidemiological study conducted by Johnson and Wilson Minnesota a period of 25 years 12% of men and 5% of women will have at least one symptom of renal colic until the age of 70 years. Unlike other types coralliform kidney stones are more common in women (in 70 percent cases) than in men. Since 2005 LR tops in renal pathologies in our country in recent years has increased the number of nephrectomy because of complicated and infected calyces stones in Moldova.

The etiology of coralliform gallstones is varied with exogenous and endogenous factors, and one of them occupies a prominent place urinary infection. In the coralliform stones pathology all the theories are involved equally. Randall's theory, Carr's theory, the theory stones intranefrone theory of crystallization, glycoprotein matrix theory, ring theory precipitating urinary theory of crystallization inhibitors. As a rule, coralliform urolithiasis has hidden symptoms that lead to a massive increase coralliform stone before being detected, especially it can form within a few weeks or months. The methods of treatment for the coralliform stones are Nephrolithotomy percutaneous, open surgery, laparoscopic surgery, extracorporeal lithotripsy (ESWL), multimodal treatment, conservative treatment and prophylaxis. Patient B., aged 66, was scheduled treatment in urology department with clinical diagnosis Republican Clinical Hospital. Nephrolithiasis. The coralliform stones on the right kidney. The coralliform stones in the left lower pelvis. Latent chronic pyelonephritis coralliform. Treatment - Right rear Pyelolithotomie.

Conclusion: Coralliform stone is a particular entity for the urological diseases with a relatively high incidence, with a varied and complex etiology, and one of the primary factors occupy kidney infection. Treatment for each patient is individual. Prevention and metafilaxia provides relapse prevention and are performed in dependency of the chemical composition of calculation extracted.

Keyword: Caliform Stone

95. SURGICAL TREATMENT OF DISTAL FEMURAL BONE FRACTURE

Stepan Nicolae

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Introduction: Distal femoral fractures largely occur as a result of high-energy trauma in the younger population and as osteoporotic fractures in the elderly population. This kind of fracture leads to functional impotence over a long period of time and therefore seriously affect the quality of life in these patients. Whichever method of treatment is chosen, the goal is to restore joint congruence, anatomical length, function of rotation and axial alignment, which will determine early initiation of recovery treatment and range of movements knee joint.

Materials and methods: This study is based on 56 patients who were treated in Clinical Hospital of Traumatology and Orthopaedics, in 2-nd department, between 2011-2013. Patients of both sexes aged between 20-83 years. The examination was performed on study cases by :sex, age, affected side (right or left) period of hospitalization and up to surgery, urban or rural, period of time from injury until surgery.

Discussion results: In this study showed a prevalence of sex, namely the incidence in women is 67.9% and 32.1% men. The circumstances for the production of fracture was: habitual accident - 40 cases (71,4%), car crash - 11cases (19,6%), falls in the street - 5 cases (9%). In these 56 cases were used following types of fixation: locked plate-35cases (62,4%), blade plate - 11cases (19,6%), cortical plate -6 cases (10,7%), blocked intramedular nail - 4cases (7,1%).

Conclusion: Incidence rates for distal femoral fractures do indeed rise exponentially with age. This injury will affect the quality of life and working capacity for a long period of time. A

complete and accurate assessment followed by appropriate treatment gives good results away with resumption of previous trauma

Keywords: Distal femoral fractures, trauma, types of fixation

96. MANAGEMENT OF TIBIAL BONE DEFECTS SURGICAL TREATMENT

Stratan Vladimir

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Introduction: Treatment of bone defects remains a pressing dilemma, to which the tibial bone and damage. Issues that need to be considered in resolving this problem anatomical and functional recovery of integrity affected bone segment. So to get a positive result in treatment must to choose the optimal treatment method that best. Which is the purpose of this work - studying surgical methods of treat in tibial bone defects.

Material and methods: This study is a retrospective and was carried out based on having cases of tibial bone defects were treated in the years 2007-2013 in the IMSP SCTO and IMSP CNȘPMU. The object of study is 52 patients, residents of various districts of Moldova addressed by specialized medical care, based on which we aimed to study some aspects of bone plasty of tibial bone defects.

Results: Tibial bone defects in solving surgical treatment plays a key role. Analyzing data files studied we found that the total number of bone plasty tibial bone defects plastic used in patients with tibial bone defect marginal method was used only bone plasty with vascularized fibula in tibial total circular defects in 18 patients were returned by the migration of the fibula, which functionally integrated in 18-20 months. Patients throughout the functional integration wore protective external fixators.

At 31 patients with circular defects were restored tibial bone lengthening method AFE Ilizarov callus fun. Fault with small (<3 cm) or treated relatively more often by means of bone plasty with vascularized fibula, these large (3-8 cm and > 8 cm) by the method of stretching fun AFE Ilizarov callus.

Conclusions:

1. Surgical treatment of tibial bone defects is varied and existing methods are not perfect, so that the best methods of treatment of infected defctelor still remain to be vascularized fibula method and callus fun with AFE Ilizarov.

2. Statistical analysis of addiction treatment method size circular bone defects - correlation reveals that the majority of small defects are treated by vascularized fibula method and the large callus an entertaining method of Ilizarov AFE.

97. FRACTURES OF LOWER END OF THE HUMERUS.

CLINICAL MANIFESTATIONS, DIAGNOSIS AND TREATMENT

Tofan Cristina

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Introduction: Fractures of the distal humerus have been shown to account for 2-6% of all fractures. These fractures occur in a bimodal age distribution, with fractures in younger patients occurring as a result of high energy mechanisms and fragility fractures occurring in the elderly as a result of low energy falls. All of these fractures represent a challenge to the surgeon due to the distal location and predilection towards articular involvement. Due to these issues multiple treatment strategies have emerged with the majority of current recommendations including open reduction and internal fixation (ORIF.)

Purpose and objectives: The analysis of clinical material of the lower end of the humerus fractures and treatment tactics used in the, Department of Hand Pathology and Microsurgery during 2010-2013.

Materials and methods: The study was realized in the Orthopaedics and Traumatology Department, of the Public Medical Institution The Hospital of Traumatology and Orthopaedics, Department of Hand Pathology and Microsurgery.

The study had a retrospective character, based on the analysis of clinical observation records, laboratory data and surgical examination in a group of 38 patients with a diagnosis of humeral palette fracture, treated during 2010-2013.

Results:

1) Humeral palette lesions are more frequent at people of young age, working age (<60 years) - 25 persons (66%). The average age of the patients was $54.07 \pm 4,4$ years. Female average age was $52.96 \pm 3,6$ years (varying between 26 to 76 years), while men's average age was $57.2 \pm 5,2$ years (varying from 22 to 75 years).

2) In this study it was demonstrated that the lesion of the right member represent - 25 cases (66%), which is closely connected with work activities of the patients.

3) In rural areas humeral palette fractures (79%) occurs more frequent than in urban areas (21%) because of the daily activities and work in agriculture.

Conclusion: In the hospital are focused grave cases from all the country, that is why the largest share is formed of patients with humeral palette fracture type C- 30 cases (79%).

Keywords: fracture, lower end of the humerus, fixation

98. PANCREATIC PSEUDOCYSTS

Budac Viorel

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Introduction: Pancreatic pseudocysts are best defined as localized fluid collections that are rich in amylase and other pancreatic enzymes, that have a non-epithelialized wall consisting of fibrous and granulation tissue, they usually appear several weeks after the onset of pancreatitis. They are to be distinguished from acute fluid collections, organized necrosis, and abscesses. The purpose of this study was to optimize the diagnosis methods and to elaborate a rational surgical management of the pancreatic pseudocyst, through the correlation of surgical techniques with the optimal surgical timing, given by the maturation degree of pseudocystic wall, thus the complications and recurrences rates to be minimum.

Materials and methods: In this retrospective study I have described the results of the complex treatment of 121 patients with pancreatic pseudocyst, communicating or not with pancreatic duct, and wirsungian hypertension, operated at the Surgical Clinic No. 2 during the period of 2006 to 2013. The studies propose a contemporary diagnosis algorithm, which includes clinical, and laboratory data and imagistic explorations (echography, simple abdominal radiography, gastro- and duodenography, retrograde endoscopic colangiopancreatography - ERCP, CT, MRI, wirsungography and intraoperative echography).

Results: The surgical indication was mature pancreatic pseudocyst in 45 (37,2%) cases, by pancreatic pseudocyst during maturation (less than 6 month from the debut) in 17 (14%) cases, and by pancreatic pseudocyst with postoperative complications in 59 (48,8%) cases, facts which bring to the elaboration of a self surgical management. Cystopancreatojejunostomy on isolated Roux loop, was made in 50 (41,3%) cases – 16 (29,7%) in group I, 34 (49,55%) in group II. External drainage was made in 49 (40,5%) cases. Minimally invasive operations were made in 5 (4,1%) cases. Retrograde endoscopic ERCP with papilosphincterotomy were made in 2 (1,65%) cases. In 4 (3,3 %) cases there were applied cystopancreato-jejuno anastomosis on Omega loop. In 5 (4,1%) cases there were made cystopancreato-jejuno anastomosis with colecysto-jejuno anastomosis, respectively coledoco-jejuno anastomosis in patients with pancreatic pseudocyst complicated with mechanical jaundice. In one case (0,83 %) was made colecystectomy with cystopancreato-jejuno anastomosis on isolated Roux loop. In one case (0,83 %) with pyloric stenosis there were made cystopancreato-jejuno anastomosis associated with coledoco-jejuno anastomosis, gastro-entero

anastomosis and colecystectomy. In one case (0,83%) was made chistopancreato-jejuno anastomosis with colecisto-jejuno anastomosis on Omega loop, and 2 cases (1,65%) had benefit from another types of anastomosis. Caudal pancreatic resection with pancreatico-jejunal derivation and splenectomy was made to 1 patient (0,83 %). The postoperative complications rate were 26 (21,48%) cases –group I - 16 (29,62%), group II -10 (14,92%), early 21(17,35%) cases - group I -14 (25,92%), group II -7 (10,44%) with an average of hospitalizing days of 15,73 days – group I (21,11 days), group II (11,40 days); late 5 (4,1%) - group I – 2 (1,65%), group II – 3 (2,5%). These difficulties in postoperative evolution necessitated urgent conservative therapeutic maneuvers and just in 5 (23,80%) cases – group I -3 (21,42%) cases, group II - 2 (28,57%) cases, clinical situation determinate surgical reintervention. It was necessary a surgical reintervention of internal derivation at distance to 25,51% cases. From a total of 25 reinterventions: 12% – all from group I – had benefit of external drainage, 4% – from group I - of miniinvasive drainage, and the rest of 84% had benefit of chistojejuno anastomosis on isolated Roux loop in “Y”. It has to be mentioned that any of cysto-jejuno anastomosis on isolated Roux loop (50 made as first surgical step and 21 as reintervention) had not developed postoperative fistulas and had proved permeable at ERCP and MRI control. At 1 year from surgical intervention, 71 (72,45%) patients - group I – 29 (76,3%), group II -42 (48,33%) took back their previous activities, having an active job. 19 (19,2%) patients - group I -7 (26,92%), group II -12 (20,0%), renounced to some activities which necessitated intense physical effort, and 5 (5,1%) patients - group I -2 (2,63%), group II -3 (6,67%), renounced completely to all previous activities. From 13 (10,75%) - group I - 6 (15,8%), group II - 7 (11,66%) persons with handicap, preoperatively integrated in invalidation financial help, postoperatively just 5 (5%) persons -group I -2 (25%), group II - 3 (5%) maintained this state, 3 (3%) - group I -2 (5,26%), group II -1 (1,66%) having a relatively normal life, and 5 (5%) - group I – 2 (5,26%), group II – 3 (5%) lost this state, regaining their work capacity, being not invalid anymore. Satisfaction was reached in 94,9% patients, just 1,02% patients being unsatisfied with their actual state. Postoperative mortality reported on a period of 12 month was 3,3%.

Conclusions: The analysis of precocious and late results after interventions of cysto-jejunal decompression derivation made us to consider these operations being elective in the decompression of the pancreatic pseudocyst and in the reestablishment of the pancreatic juice flux in digestive tract, allowing a good socio-professional reintegration, but with an attentive monitoring of the patients.

Key words: pancreatic pseudocyst, surgical treatment

DENTAL MEDICINE SECTION

1. JOINING FUNCTIONALITY AND ESTHETHICS IN THE TREATMENT OF REDUCED UNIDENTAL EDENTATION BY MEANS OF ADHESIVE BRIDGES

Ababii Victoria

Academic adviser: **Fala Valeriu**, M.D., Ph.D., Associate Professor, Therapeutic Stomatology Department FCEMPH; **Vitalie Gribenco**, Assistant Professor, Orthopedic Stomatology Department, Ilarion Postolachi, State Medical and Pharmaceutical University „Nicolae Testemițanu”, Chișinău, Republic of Moldova.

Introduction: Partial unidental edentations of dental arcades in the front side, including the absence of the premolars lead to disorder from aesthetic perspective and of the occlusal function. In line with the biological principle, the modern concept of stomatological treatment provides for mini-invasive interventions on the dental tissues. On the background of this concept, fixed prosthetic restoration supported on implantation blunts continue to be elected therapeutic solutions of treating unidental edentations. In clinical situations with relative or absolute contraindications to implantation therapy, the adhesive bridges, achieved by direct restoration technique, ensure a long-lasting in-between solution in the dentist treatment schemes. Using the wax-up technique under this treatment is efficient because of visualizing the form and design of the future construction, but also as a reference for the individual rehabilitation of the overjet and overbite, occlusal parameters that characterize the anterior guidance.

Materials and methods: There were examined and assessed 5 patients with partial unidental edentations in the front side of the dental arcades, including the lack of premolars. Along with the clinical examination, there were performed orthopantomographies; if needed-dental-periodontal x-rays; as well as instrumental functional diagnosis. Based on the diagnosis models, there were assessed the parameters of the potential prosthetic space. The data of the aesthetic evaluation were input in a special fiche developed by us.

Results: Data of the clinical-instrumental examination provided us information about the condition of the teeth, condition of the mucous membrane, form and profile of deprived teeth ridges. Assessment of parameters of potential prosthetic area in the selected clinical cases proved insufficient space to plan an implant-prosthetic treatment. Wax-up has been performed on diagnosis models mounted in the adjustable articulator, taking into account the condition of the overjet and overbite, which feature the anterior guidance. The data from the aesthetic evaluation fiche provided useful information in the treatment consisting of direct restoration with adhesive dental bridges.

Conclusions: The results of the aesthetic evaluation, as well as the data of the examination of unidental edentation patients governed the choice of a treatment with adhesive bridges, accomplished by means of direct method.

Keywords: Function, aesthetics, adhesive bridges, occlusion

2. THE TREATMENT OF CHRONIC GRANULATE PERIODONTITIS

Albot Andrei

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Introduction: Chronic periodontitis is an inflammation of the apical parodontium mainly infectious etiology, manifested by chronic inflammation of the apical periodontal space and alveolar bone demineralization, more or less extensive, diffuse. Streamlining and improving the methods of treatment of chronic granulate periodontitis is one of the most actual problems of dentistry.

Purpose and Objectives: To study the methods of treatment of chronic granulate periodontitis and to choose the best one, choosing tools and materials that will lead to the desired result.

Materials and methods: In accordance with the purpose and objectives, conservative treatment was performed on 18 patients with chronic granulating periodontitis. Treatment was carried out in several visits, using a temporary filling material "Diapex" based on calcium hydroxide and iodoform.

Results: Optimal type of treatment of this pathology is the endodontic technique while a surgical method is more traumatic for the patient. The endodontic technique includes instrumental removal of necrotic debris from the root canal, antiseptic irrigation and 3Dimensional obturation of endodontic space. The evacuation of disaggregated masses in periodontitis is effectuated by using several steps, part by part, without pressure, under the protection of antiseptic, to not to push the necrotic contents in periapical tissues. Currently the most common root canal irrigation solution is considered sodium hypochlorite. The combination of ultrasonic energy with this antiseptic solution increases its effectiveness. Final filling of root canals can be performed only when the tooth is asymptomatic and the endodontic space can be dried. In other case the temporary obturation is recommended. The most often it is effectuated by the pastes based on calcium hydroxide having the following properties: it has antimicrobial activity, have the ability to remove persistent apical secretions, stimulates the formation of calcified tissue, accelerates the decomposition of necrotized masses.

Conclusion: Successful treatment of chronic granulate periodontitis depends on the strict compliance of requirements that need to be respected during each stage separately. The use of sodium hypochlorite in combination with ultrasound and with the drugs based on the calcium hydroxide increases the effectiveness of the treatment of chronic granulate periodontitis.

Keywords: chronic granulate periodontitis, treatment, irrigation, obturation

3. THE SAFETY OF TEA DRINKING IN REPUBLIC OF MOLDOVA

Burlacu Lilia

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Introduction: Tea is one of the most common beverages in Republic of Moldova. Besides its beneficial effects, studies have shown that tea infusions provide a high intake of fluoride in the human body. Therefore, with time, tea drinking can cause fluorosis – a poisoning which has destructive effects on bones and teeth.

Purpose and Objectives: this study is to analyze the fluoride concentration of the most popular brands of tea in Republic of Moldova, in relation to individual consumption habits for the assessment of risks of these beverages.

Material and Methods: We have developed an online questionnaire regarding individual preferences and some brewing habits of tea in the Moldovan and Romanian population. 145 people aged between 15 and 60 years completed the questionnaire. According to the performed ranking, we selected 45 varieties of teas and analyzed them to the Biochemistry Department of UMPH Tîrgu Mures. We used a fluoride ion selective electrode Orion 720 A and Hanna pH meter.

Results: Greenfield, Lipton and Ahmad brands are the most preferred in Republic of Moldova. The laboratory results showed that black teas (n=18, [F]=1.32 ppm) contain more fluoride than green teas (n=19, [F]=0.85 ppm). Other teas (n=6, [F]=0.772 ppm) contain a moderate amount and the hibiscus teas (n=2, [F]=0.056) are the poorest in fluoride. Green tea has the highest pH (pH=5.97), hibiscus teas are the most acidic (pH=3.315).

Conclusion: The teas which are consumed in Republic of Moldova have optimal fluoride concentrations. The harm can occur if it overlaps with a high fluoride concentration of drinking water. We recommend a moderate tea consumption, especially in areas with increased risk of fluorosis.

Keywords: fluoride, food safety, tea, pH, fluorosis

4. FLAP SUTURING IN SURGICAL CROWN PROCEDURE

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Introduction: Surgical crown lengthening is standard procedure for radicular rests usage and case series which include biologic width and ferrule effect being compromised. In the end of this procedure a flap suturing is essential, with other words being said suturing may be the one who is going to make a difference between failure or success. This paper will analyze the type of needle, type of suture and technique of suture and will contrast it to the present literature data.

Purpose and Objectives:

Materials and Methods: The present manuscript is presented as a retrospective study on the basis of 63 consecutive patients. Considering the flap approximation as the main purpose of flap suturing, different types of sutures, needles, and suture materials were utilized. Types of sutures used in periodontal surgery are mainly related to empirical background of the surgeon.

Results: Simple sutures was mainly used, all of the 63 patients being treated by this mean. In a single case the 8 shape suture was used—due to bad access to the surgical wound. Mattress sutures were also mainly used because of its maneuverability and secureness of the flap stabilization. Vertical mattress sutures were used in 48 patients, and horizontal mattress sutures was used in 9 patients. Circumferential suture was used in 3 patients, mainly because the lack of the papilla approximation following another type of suture. Retromolar suture was used in 3 patients all of this cases presented the need of distal approximation due caries activity. Continuous suture was used for 23 patients. In all of this cases different type of sutures was used, mainly because flap suturing after surgical crown lengthening cannot be achieved by one suture alone. For 58 patients the suture material was polypropylene, for 5 silk, and in 9 cases vicril. polypropylene was the most suitable material because of its nature which will not allow plaque accumulation. In the most cases (58) the thickness of the material was 5–0.

Conclusions: In surgical crown lengthening the most used suture material will be the polypropylene with the thickness of 5–0. The most frequent technique for flap suturing will be the simple interrupted suture, the suture wich will be used not that often will be figure 8 suture.

Keywords: Suture, surgical crown lengthing

5. THE USE OF ALLOTROPIC FORM OF OXYGEN IN THE TREATMENT OF CHRONIC APICAL PERIODONTITIS

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Introduction: Currently, the issue of the treatment of the teeth with endodontic periodontitis is payed a particular attention. AThe main purpose of endodontics is the ensure permanent sterility of the macro and micro dental root canals and the creation conditions for maintaining sterility in the future. The intracanal use of solutions enriched with ozone currently presents a contemporary method of treatment of chronic apical periodontitis. The process of endodontic space with ozonated physiological solution will increase the chances of success during the treatment of chronic apical periodontitis the introduction of ozonated serum (solution) in the periapical space will also increase the chances that the tooth to be tolerated.

Purpose and Objectives: The inactivation with ozone of microflora involved in chronic apical periodontitis.

Materials: Ozonator JQ type-589, thermostat TC-80 M-2, autoclave, spirtiera, bacteriological loop, needle length 100 mm and the diameter cannula of 5 mm, boxes Pietri, bacteriological tubes, bacteriological medium nutrient (agar, blood, sodium chloride), microbial culture – Streptococcus β -hemolyticus of clinical material.

Methods: In the bacteriological tube was poured 4 ml of sodium chloride 0,9%, then with bacteriological loop was suspended the Streptococcus β - hemolyticus culture, until the turbidity of 0,5 units according to Mc Farland standard. The obtained suspension was divided into 2 tubes in equal amounts. In the tube nr.2 was introduced a needle of length 100 mm and the diameter cannula of 5 mm, connected through the rubber tube to ozonator. When the needle was introduced simultaneously was set the time of exhibition 2 minutes. After this from both tubes, which was subject to ozonary and which was not subject was done the seeding with bacteriological loop on blood agar in the Petri box divided into 2 sections. The boxes with environments were placed in the thermostat 18-24 hours, temperature $36\pm 1^{\circ}\text{C}$. The recording results were visually performed counting the number of colonies growing from both suspensions (with and without ozone). On the sector without ozone no.1 grew 350 colonies, on the sector with ozone no.2 grew 3 colonies.

Conclusion: Was demonstrated the antimicrobial activity of the ozone. The action time of ozone used by us is sufficient to inactivate microorganisms. The application of physiological ozonated solution in the treatment of chronic apical periodontitis will greatly enhance the effectiveness of treatment.

Keywords: chronic apical periodontitis, the ozone, ozonated physiological solution

6. CONSIDERATIONS IN THE DIAGNOSIS AND MODERN TREATMENT IN IMPACTED CANINES

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Introduction: Dental Inclusion is an eruption pathology that has had a growing incidence in the last years. The anomaly causes different types of disorders because of the tooth absence or the persistence of the temporary ones for more than 3 years after the alleged terms of eruption. Diagnosis and treatment of canine inclusion is complicated because of an abnormal location of the unerupted canines in the dental bone.

Purpose and Objectives: of this project is to rise the efficiency of techniques we use for determining the position of impacted teeth and find an effective technique for moving it on the dental arch with the Kilroy I Spring usage.

Materials and methods: Our work was based on the study of 22 patients, aged 15-24 years, being diagnosed with impacted canines. They were divided into 2 groups: Ist group-12 patients being treated with the usual orthodontic technique; IInd group-10 patients with Kilroy I Spring usage for tooth extrusion from the alveolar bone. Patients were exposed to Rx, clinical exam and casts biometrical study.

Results: After the surgical exposure and use of fixed orthodontic appliance we have finished 14 cases with one-sided impacted maxilla canine; 6 cases with bilateral impacted superior canines and 2 cases with impacted canines on both dental arches. Kilroy I Spring was used for canine extrusion in 10 patients. We've also noticed a 30% shorter period of tooth recovery and reposition in the dental arch.

Conclusions: (1) On the stage of diagnosis it is important to use the CT, which allows us to determine the impacted tooth correct position in the dental bone and allows us to choose the right surgical exposure technique. (2) The use of Kilroy I Spring shortens the impacted teeth extrusion period. (3) It is very important to have a fixed retention at the end of the treatment for maintaining stable and durable results.

Keywords: Impacted teeth, surgical exposure, Kilroy I Spring

7. MANIFESTATIONS OF GASTROINTESTINAL DISEASES IN THE ORAL CAVITY

Mihalachi Eudochia

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Introduction: Oral health is integral to overall health and can not be separated. Impact of conditions and systemic diseases on oral health is already recognized therefore, we can say that certain conditions which commonly affect various organs in our body may influence the buccal mucosa. Thus, patients with gastrointestinal disorders require special attention regarding dental treatment, not only because of the specific conditions of the disease and its many oral manifestations but also due to side effects and peculiarity of treatment administered. Risk assessment and oro-dental care involves a detailed examination of intra-and extraoral soft tissue, a radiographic examination and consultation with a hepatologist or other specialists.

Purpose and Objectives: The goal of study is to highlight the importance differentiation of gastrointestinal disease manifestations in the oral cavity , evaluation of clinical symptoms in order to perform a professional and effective treatment.

Materials and methods: The study was performed on an example of 50 patients diagnosed with various gastrointestinal diseases. Rigorous research involved examination of these patients, a questionnaire containing questions about buccal disorders, their evolution, their jugular during the treatment, as well as laboratory indices for every single condition. Simultaneously, we analyzed 150 patients' observation cards both in Republican Hospital, as well as in municipal hospital „Sf. Arhanghel Mihail” in 2013-2014, out from the amount that is 22 gastro-duodenum ulcer, 40 chronic gastritis, 25 chronic colitis flare, 23 gastro-duodenal, 5 Crohn's disease, 35 chronic hepatitis cases.

Results: Evaluation of the oral health of the group of patients with gastrointestinal disorders reveals the presence of the following types of pathologies of the buccal mucosa: language sabur, recurrent thrush. Along with mouth diseases there were detected other stomatognathic system disorders like: dental caries, gum disease, ulcers, disturbances in mastication and ingestion of liquids, edentulous, dental malocclusions, halitosis, tooth discoloration and pain.

Conclusion:

1. Our findings suggest that oral mucosa disorders are more severe in patients with chronic gastro-intestinal tract and induce a systemic inflammatory response.
2. The basic treatment of gastrointestinal diseases, as well as buccal reduces the inflammatory burden and diminishes the serum levels of the marker proving the importance of interventive therapy in patients with chronic gastrointestinal disorders.
3. The need for knowledge and differentiation of gastrointestinal disease manifestations in the oral cavity is an important preventive measure in everyday clinical practice.

Keywords: oral cavity, gastrointestinal diseases

8. THE STABILITY OF THE SKELETAL MOBILIZED PARTIAL DENTURES – CONTEMPORARY ASPECTS

Moraru Mariana

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Introduction: The prosthetic treatment, no matter of the construction of the used dentures, has as a goal the recovery of the morphological aspect and functional-biological aspect of the stomatognathic system. In the case of the treatment with the help of the skeletal mobilized partial dentures, the realization of these objectives can be achieved by the construction of the prosthetic piece in correspondence with the individual peculiarities of the protein field, thus assuring its integration in biological and functional aspect with all the components of the stomatognathic system.

Purpose and Objectives: The evaluation of the factors that determine the stability of the skeletal mobilized partial dentures and the argumentation of the indirect maintenance means.

Material and methods: It was created a database having as a support the observation sheets of the patients with the partial bimaxillary edentation or unimaxillary and an individual questionnaire, which contains the results of the instrumental-clinical exam, diagnosis, the treatment plan, and the results of the treatment by the skeletal mobilized partial dentures.

Results: It was confirmed that the individualization of the construction of the mobilized partial dentures presents more aspects which need careful evaluation of the clinical picture peculiarities, partial protein field, and knowing the stabilization mechanism of the partial dentures. The mobilization of the partial dentures, including and those skeletal, are determined by a range of factors: occlusal forces, gravity, traction of the sticky elements, the mobility of the soft tissue around the protein field. Displacement of the dentures has a complex character and produce according to a straight or circular trajectory. For the contraction and limitation of the amplitude of these displacements as is it possible, there are used systems of maintenance, support and stabilization with the direct action as the indirect means of maintenance.

Conclusion: Planning the means of maintenance with direct and indirect action and their topographical location is based on the evaluation of the biomechanics of the partial denture displacement, on one hand, and morphological conditions of the protein field characteristic for this case.

Keywords: SMPD (skeletal mobilized partial dentures), stabilization, tipping, indirect means

9. REHABILITATION PARTICULARITIES OF COMPLETELY MANDIBULARY EDENTULOUS PATIENTS WITH OVERDENTURES SUPPORTED BY IMPLANTS

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Introduction: Prosthetic constructions with a muco-oseus support have a small performance. lead to a faster atrophy of the bone and anatomical elements cannot provide adequate stability of the prosthetic construction during function. The McGhill Consensus (2002) cites that conventional prosthesis isn't anymore the optimal treatment modality for completely edentulous patients. That's why nowadays the overdentures popularity is rapidly increasing. The huge variety of elements for prosthesis anchorage, support and stabilization allows its application in different clinical situations.

Purpose and Objectives: The treatment evaluation of completely mandibulary edentulous patients with removable overdentures supported by 2 and 4 two stage dental implants and comparative analysis of the methods reported to the literature data.

Materials and methods: Two completely mandibulary edentulous patients have been included in the study. Both cases have been solved initially by removable prostheses. Because of poor stability and speaking difficulties, the removable prostheses have been transformed into implant supported overdentures at 8 weeks after surgery. The first case has been solved by an overdenture supported by 2 dental implants the second patient –phased, only two implants have been loaded after the second stage. the other two had special releasing holes in the prosthesis. They were connected only after 8 weeks. to create a time for patient adaptation to the prosthesis. The following steps were performed in both cases: impression obtaining with silicone material, determination of intermaxillary positions, ball-attachment fixation, occlusal adjustment, periodic control. The following values have been monitored for one year: Mombelli plaque indices measured on the o-ring, implant stability (Periotest Classic, Siemens AG, Bensheim, Germany), the status of denture and anchorage system.

Results: Because of a small implant number, the two implants supported overdenture is less stable during function and accelerates the bone resorption from the lateral regions of mandible and stabilization system wearing. 4 implants supported overdenture provided a better stabilization and lesser wearing of the o-ring. Both patients had second degree plaque deposits (Mombelli) during the control visit after 3 months from prosthetic delivery. After a short instructing in oral hygiene the

plaque indice the following visit was 1(Mombelli). The secondary stability values were -6 for 5 implants and -7 for 1 implant.

Conclusion: The choice of one or another method depends mostly from bone volume, arch form, the demands and possibility of patients. The use of overdentures supported by two and four dental implants have a better stability than conventional prosthesis, provide a good esthetic appearance, improve the function of masticatory system.

Keywords: Overdenture, complete edentulism, ball-attachment

10. BENIGN MIGRATORY GLOSSITIS. ETIOLOGY. CLINICAL FINDINGS. DIAGNOSIS. TREATMENT

Popusoi Cristina

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Introduction: Geographic tongue or benign migratory glossitis is a condition that can be observed at any time in life. The occurrence appears to be spontaneous and only occasionally associated with a physical, chemical, or environmental exposure. Since the manifestations are often subtle and without symptoms, an exact prevalence remains unknown, but could involve as many as 10% of a population. Once geographic tongue occurs, it usually remains in a chronic or cyclic form indefinitely.

Purpose and objectives: Secondary glossitis are a topic of discussion in many literature, but in many cases the information is not so wide, therefore, we aimed to study more details about geographic tongue, based on bibliography and own clinical cases.

Materials and methods: In the current study we examined 55 patients. The clinical examination and anamnesis was completed with photostatic method.

Results: We examined 55 patients, of which 5 were diagnosed with benign migratory glossitis, which is 8%, of which 2 are children, two women and one man. Changes were detected accidentally on clinical examination of the oral. Although geographic tongue is one of the most prevalent oral mucosal lesions, there are virtually no studies available with the objective to elucidate the etiology behind this disorder. In our cases heredity has been reported, suggesting the involvement of genetic factors in the etiology, and also in one case the etiology is supposed to be related with gastrointestinal diseases. There are classic clinical findings of depapillation of the filiform papillae on the dorsum of the tongue, causing erythematous configurations that can be variable in size, shapes, and number. These areas are bordered by a slight increase in the surrounding filiform papillae, forming a white-appearing, narrow, peripheral margin. We did the differential diagnosis with others surface tongue lesions that are generally asymptomatic include candidiasis, lichen planus, and lupus erythematosus. In addition, the clinician must be aware of the possibility of premalignant dysplasia. No treatment is required in asymptomatic cases, but in other cases is indicated. Symptoms are treated empirically.

Conclusion: It is important for patients to be insured that although this is a chronic or cyclic condition, benign migratory glossitis does not represent a neoplastic, infectious or contagious disease.

Keywords: Benign migratory glossitis, chronic, heredity, asymptomatic

11. THE TREATMENT OF MANDIBULAR CONDYLE FRACTURES

Sali Eugeniu

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Introduction: Mandibular condyle fractures, as seen by specialists in the field, are some of the most difficult, given the anatomical complexity and complications that may arise. There are two basic methods of treatment of mandibular condyle fractures - conservative - orthopedic and surgical. In most cases, treatment is conservative, using different procedures and orthopedic devices like, standard or

individual splints, individual prostheses, devices intra-, or extra oral devices, made by the doctor or laboratory. If reducing movement and fixing of fragments in the correct position is impossible by orthopedic means, recourse is made to surgical methods of treatment of mandibular fractures. Mandibular osteosynthesis in articular condyles region is hardly feasible, and condylar osteosynthesis with medial dislocation is considered by the experts one of the most difficult surgeries.

Purpose and Objectives: To study the efficacy of the method of osteosynthesis of the mandible in condilian process fracture with dynamic dislocation.

Materials and methods: In the 2002-2004 periods were surgically treated 9 patients with condylar fractures with dislocation and displacement of it in the infratemporal fossa. Age of patients varied between 18 and 43 years. After establishing the diagnosis (clinically and radiographically) patients were applied dental splints and the mandible was fixed in centric occlusion. In the days immediately after admission patients underwent surgical treatment under general anesthesia with endonasal intubation. On the 3rd day after the trauma, surgery was performed in 4 cases in 4 -1 -1 at the 5th to 6th -1, 9th -1 to and a patient underwent the operation at the 37th day after the trauma. The prevailing typologies of trauma are the ones from falls - 5 cases, aggression - 2, car accident - 2. Isolated condylar fractures were in three patients of which two on both sides. In three cases bilateral condylar fracture in other three cases unilateral condylar fractures were associated with fractures of the mandibular body (chin -2, paramedian-3, angular - 1). In 8 patients the fracture was intracapsular and one - extracapsular. In 1 patient fracture was open (fracture of bone wall of the external acoustic meatus).

Results: For the synthesis of dislocated condyle, the fragment obtained by osteotomy was used in 4 cases each with two titanium screws, in another case, the fracture being low subcondilian, the condyle was fixed with a miniplate by titanium screws.

Therefore in 5 patients condyle was preserved. In 4 comminuting intracapsular fracture patients, condyle synthesis was not possible to perform. In 2 cases condyle fragments, were removed and the wound sutured in layers. In the other two cases vertical osteotomy was performed, and the upper end of the fragment obtained by osteotomy was shaped imitating the condyle. The obtained fragment was displaced into glenoid fossa and fixed by the branch thus preventing the shortening of branch and occlusion disorders. Difficulties in separation and preparation of the dislocated condyle occurred in the patient operated on the 37th day after the trauma. During Operation: TMA scar, a fibrous callus between the internal cortical of mandible ramus and internally dislocated condyles, previously with angulation of more than 45°. Repositioning the condylar dislocation was possible after vertical osteotomy on both sides by the method described above. To restore TMA function is required early resumption of mandibular movements during the postoperative period. In patients with unilateral fracture, immobilization was of short duration - 7 days. In patients with condylar fractures associated with fractures in other parts of the mandible, with no surgical intervention, bimaxilar immobilization was suppressed over 21 to 28 days. Clinical and radiographic examination of patients on time showed the following: In the 5 patients with intact condyle, palpation through external auditory canal, determine the trip of the articular head, sometimes crepitation and crackles. Occlusion was maintained; radiologically condyle was located in the correct position. In the two patients with unilateral removed condyle, occlusion was disordered and jaw movements with deviation to the injured party. In two patients with removed condyle and shaped fragment of branch on palpation of TMA, trip if condyle was attenuated, occlusion was impaired. In patients operated bilaterally appeared a small vertical inclusion space in frontal region. This is due to osteolysis of fragments edge with shortening the branch. Current examination results showed that "transplant" is in the correct position and integrates to the mandible. The fate of this "transplant" remains to be determined at further control examinations.

Conclusion: The method of osteosynthesis of condylar fractures with pronounced internal dislocation and displacement facilitate the anatomical restoring of condylar processus and prevents the appearance of stiffness.

Keywords: osteosynthesis, mandibular condyle, TMA, stiffness

12. INTERDISCIPLINARY ORTHODONTIC AND PROSTHETIC TREATMENT OF PATIENTS WITH CLASS 1 ANGLE MALOCCLUSION

Sofia Mostovei

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Introduction: Class 1 Angle malocclusion is a polyetiologic pathology with various clinical situations, this is important to be considered in treatment planning of these patients and it is necessary to determine the etiology and perform a deep clinical examination to obtain the whole information and achieve the expected results. The interdisciplinary orthodontic and prosthetic treatment highly demanded among adult patients. The success of treatment is appreciated functionally, esthetically and gnathologically. Sometimes clinical particularities of the malocclusion don't allow the prosthetic construction to be functionally and esthetically made, which needs a preliminary orthodontic treatment in order to obtain optimal conditions for patient's rehabilitation.

Purpose and Objectives: The evaluation of interdisciplinary orthodontic and prosthetic treatment applied in the rehabilitation of one patient with first class Angle malocclusion.

Material and methods: The report was made on one patient with first class angle malocclusion, treated by the use of fixed orthodontic system (MBT™ versatil System) with following fixed prosthetic rehabilitation. The following steps have been performed during the treatment period : x-ray examination(telerradiography, Onix-Ceph analyzing program), preliminary impression obtaining and cast pouring, indirect fixation of orthodontic system, periodically activation of orthodontic arches, tooth preparation and impression obtaining with C-class silicone material, the fabrication of fixed prosthetic construction.

Results: The initial orthodontic treatment last 1.7 years, patient had been coming to control visits for all treatment period for system activation and dynamic monitoring of the changes during treatment. The contention devise was made at the end of orthodontic treatment. The rehabilitation period of the patient ended once with the fixed prosthesis delivery, which permitted to restore the lost function and esthetic appearance.

Conclusion: an important role in class 1 Angle malocclusion treatment, along with conventional treatment, is attributed to noninvasive methods of rehabilitation. The method must be chosen depending on specific clinical case, treatment period, expected results and patients demands.

Keywords: malocclusion, prosthetic treatment, fixed orthodontic system

13. BONE GRAFTING MANDIBLE IN IMPLANT-PROSTHETIC REHABILITATION

Strisca Stanislav

Academic adviser: Sirbu Dumitru, M.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: The goal of modern dentistry is to restore the patient to normal contour, function, comfort, speech, esthetics, and health. One of the most important prerequisites for achieving and maintaining successful osseointegration is the presence of a sufficient volume of healthy bone and soft tissue, at the recipient site. Bone crest atrophy represents an important obstacle in implant-prosthetic rehabilitation patients with different types of edentulism.

Purpose and Objectives: The aim of this study was to evaluate and describe surgical techniques and to create an algorithm of conduct in different degrees of mandible atrophies (type B-w, C and D by Misch).

Material and Methods: The study was axed on 33 patients, treated in ambulatory and inpatient unit by using the following methods: autogenous bone grafting from extra- and intra- oral sites, osseo-splitting, lateral synthetic bone grafting and implant placement, autogenous and synthetic bone grafting with delayed implant placement, synthetic bone grafting and implant placement, transposition of the inferior alveolar nerve, alveolar distraction osteogenesis.

Results: The mean age of the patient was $41,58 \pm 2,17$ years. Six patients who had type B (Misch) atrophy, with the mean age $38,8 \pm 5,09$ years, were rehabilitated using synthetic bone grafts and immediate implant placement. This is a simple method which provides a good outcome. Three patients with the mean age $43,3 \pm 6,38$ years, were treated using autogenous and synthetic bone grafts with delayed implant placement, this method can provide a better understanding of patients force factors, but this procedure requires additional surgical interventions. The average age of 5 patients with available bone type B+, B-w by Misch, was $46 \pm 4,08$ years, the mean width of the alveolar crest before procedure was $3,56 \pm 0,44$ mm, they were treated using osseo-splitting method, after the procedure the width of the alveolar crest was approximately 5 mm. This method is useful when a wider implant is needed to be placed to ensure a better stability with a predictable result. Two patients who suffered from type D atrophy were rehabilitated using alveolar distraction osteogenesis. Since its introduction in 1996, this procedure has been considered a viable technique for reconstruction of alveolar bone before implant placement. At the end of this procedure we increased the height of alveolar crest by 10 mm.

Conclusion: One should take in consideration the individual clinical situation, professional skills, the ratio between the risk, complications and expected results, and the psychological status of patient before choosing one of the modern methods of oral rehabilitation.

Keywords: Bone grafts, atrophy, prosthetically driven implants

14. EVOLUTION OF NON-REMOVABLE ORTHODONTIC APPLIANCES

Vinichenko M.

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Introduction: The father of modern orthodontics is considered to be an U.S. orthodontist E.G. Engle (1855-1930), who authored the most famous classification (1898) and created universal orthodontic device. It was E.G. Engle who organized the first orthodontics association, the first scientific orthodontic magazine, the world's first institute of orthodontics. The main discovery of Professor Engle was the arc (sliding arc, fixed arc, expansive arc) and their use in various devices directed towards the treatment of most types of anomalies.

Purpose and Objectives: to analyze comparative assessment between Engle's devices and their contemporary modifications.

Materials and methods: Engle's sliding arc is effective in the sagittal plane. Stationary arc of Engle uses to move individual teeth or groups of teeth. If it is used on both jaws at the same time including elastic traction it can result in sagittal, vertical and transversal movement of the teeth. Engle's expansionary arc is used both in the sagittal and vertical planes. Engle's device "Pin and tube appliance", (1912)- vertical processes (pin) soldered to the arc, for each tooth bandage ring is fixed with soldered vertical pipe (tube) that is inserted in the vertical processes on wire arc. A.G.Engle constantly modified his devices that created the ejuas-technique. Engle's device "Ribbon arch appliance" (1920)- specially developed bracket (lock) with a vertical slot in which the wire arch was installed and was fixed by means of bronze pins, the ends of which were bended. In 1928 was designed the original building of locking arrangement-brackets and rectangular arc, i.e. ejuas-technique.

Results: Modern non-removable orthodontic appliances are mostly built on the principle of universal Engle's device: braces (metal, ceramic, sapphire), locks or rings with a lock on molars, orthodontic arc (steel and nickel titanium, round and rectangular), elastic or metal ligatures, elastic traction, as well as the opening and closing springs, and so on.

Keywords: non-removable orthodontic appliances, Engle's device

15. CEPHALOMETRIC EVALUATION OF DENTOCRANIOFACIAL MORPHOLOGY OF PATIENTS WITH UNILATERAL CLEFT LIP AND PALATATE

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Introduction: Orthodontic treatment of the patients with unilateral cleft lip and palate (UCLP) still remains a significant challenge for practitioners. In order to have good treatment results, we must know which are the characteristic underlying orthodontic problems. Many studies have assessed craniomorphological deviations in patients with UCLP. However, there is controversy in the literature concerning many of these aspects. The goal of our study was: to evaluate the specific dentocraniofacial morphology of patients with unilateral cleft lip and palate with the aid of cephalometric analysis.

Materials and methods: This investigation was designed as a retrospective observational study. The studygroup comprised seven patients with UCLP, with the mean age of eightyears. Measurement were taken from lateral cephalograms according to four methods, described by Tweed, McNamara, Rickets and Steiner, using AudaxCeph software. Statistical analysis was performed according to student t-test procedure.

Results: Assessment of 51 variables and a total of 357 measurements revealed structural defficiency specific to patients with UCLP. The maxilla had a retrusive position relative to cranial base confirmed by the calculated values of the angles SNA, ANB, A-N_Pg. Reduced posterior midfacial height and larger total anterior facial height demonstrate a backward rotation of the maxillo-mandibular complex. Sagittal maxillary deficiency was associated with a retroclined position of the upper incisors, which is approved by significant deviations of the interincisival angle and Is / AN. Statistical important deviations of the parameters that describe the soft tissue profile, reported complex esthetic deviations of the upper lip and facial convexity.

Conclusions: Cephalometric analysis of seven patiens with UCLP revealed several specific morphological dentocraniofacial characteristics. The maxillary skeletal retrusion was found to be one of the greatests problem to solve. A clockwise rotation of the maxillo-mandibular complex was determined to be induces by vertical posterior deficiencies. The upper incisors are in palatoversion and lock the lower incisors in linguoversion. In all the patients, it was determined a tendency to develop an unfavorable Class III skeletal pattern.

Keywords: cephalometric evaluation, craniofacial morphology, unilateral cleft lip and palate

16. ORAL DISORDERS ASSOCIATED WITH DIABETES MELLITUS IN CHILDREN

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Introduction: The oral cavity plays an important role in the overall health of the body. Systemic diseases, such as diabetes mellitus, may first become apparent because of mouth lesions or other oral problems.

Both in Moldova and worldwide, the progressive increase in the incidence of diabetes continues. Over the years this disease has become increasingly common among children and young people. In Republic of Moldova 395 children with type 1 diabetes and 72 adolescents with type 2 diabetes are registered.

Purpose and Objectives: The aim of the study was to highlight the main dental pathologies in children with diabetes.

Materials and methods: Were examined 258 children with diabetes hospitalized in the Endocrinology Department of RCH "Emil Coțaga" during September 2013 - March 2014.

Results: Following the clinical examination of children with endocrine pathology, 258 children were suffering from diabetes (69.5%); among them 20 children were newly diagnosed and 10 children showed a prediabetes condition.

Oral disorders were not detected in children with altered basal glucose and in children with new-onset diabetes, except xerostomia (80%) and cheilitis (45%). Patients with type 1 diabetes with history disease of 2 years and more had various manifestations of mouth disorders, some of them of severe forms. Catarrhal gingivitis was detected most frequently (55%), mostly in children aged 5-10. Hypertrophic gingivitis was found in children with decompensated diabetes (32%), especially in children aged 14-16. Reduction of salivary flow in children with diabetes is a risk factor for the occurrence and development of dental caries, so there were multiple dental caries (90%), located particularly in the root or dental neck regions. Temporary tooth decay was frequently located in areas of enamel hypoplasia.

Oral candidosis was present in children with decompensated diabetes (5%). It was detected oral mucosal lesions (70%) such as stomatitis, geographic tongue, benign migratory glossitis, fissured tongue, traumatic ulcers, and lichen planus were detected. Eruption acceleration was observed in dentition until the age of 10 and delay after the age of 10 (especially for the eruption of canines and the premolars).

Conclusions: Diabetes is a chronic metabolic disease which affects the entire organism, disturbing especially the oral health. Oral manifestations related to diabetes mellitus may have a strong inclination to periodontal disease, as well as an increased incidence of dental caries, mucosal lesions, dry mouth, oral infections; they present more severe forms in decompensated diabetes. Health habits are substantial for preventing dental and periodontal diseases and maintaining oral health in children with diabetes.

Keywords: diabetes mellitus, disorders, oral health, children

17. INFLUENCE OF TOOTHPASTES ON ORAL CAVITY MICROFLORA

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Introduction: Most people start their day with personal hygiene i.e. oral hygiene, also this procedure end the day. There are many varieties of oral hygiene, which puts in a confusing situation when the consumer have to choose a specific product for a specific purpose. Many consumers make a subjective and random choice, caused by excessive of advertising. However, the best advice in using a toothpaste or any product for oral hygiene we can find in the dental office. Most consumers do not realize the true significance of its effects both positive and negative of the dental paste. Our task is to recognize certain groups of pasta with a specific effect and mechanism in order to be used rationally. This fact will offer us a better response to treatment based on certain pathologies, as well as their prevention that fact and purpose of oral hygiene.

Purpose and Objectives: To elucidate the problem facing society in choosing an effective dental paste. Testing pasta culture by oral microflora. Identifying the most effective paste in prophylaxis of infectious diseases. Conclusion about dental pastes and their impact on the oral microflora.

Materials and methods: swab from oral cavity from 6 patients, bacteriological nutrient media - blood agar, thermostat, desiccator, 6 types of dental paste.

Results: Dental pastes have proven positive effect following inhibition of culture like as: Parodontax-100%, Blend-a-Med -100%, Лесной бальзам-83.3%, Green Word Herb-83.3%, Sensodyn-66.6% , Biocalcium-50%.

Conclusions: The most obvious effect of inhibition of the cultural growth manifests the dental paste parodontax, that it will have special instructions for prophylaxis.

Keywords: tooth paste, bacteriostatic, oral microflora

18. THE STABILITY OF THE SKELETAL MOBILIZED PARTIAL DENTURES – CONTEMPORARY ASPECTS

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Academic adviser: **Oineagra Vasile**, M.D., associate professor, orthopedic stomatology chair "Iarion Postolachi", State University of Medicine and Pharmacy "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: The prosthetic treatment, no matter of the construction of the used dentures, has as a goal the recovery of the morphological aspect and functional-biological aspect of the stomatognathic system. In the case of the treatment with the help of the skeletal mobilized partial dentures, the realization of these objectives can be achieved by the construction of the prosthetic piece in correspondence with the individual peculiarities of the protein field, thus assuring its integration in biological and functional aspect with all the components of the stomatognathic system.

Purpose and Objectives: The evaluation of the factors that determine the stability of the skeletal mobilized partial dentures and the argumentation of the indirect maintenance means.

Material and methods: It was created a database having as a support the observation sheets of the patients with the partial bimaxillary edentation or unimaxillary and an individual questionnaire, which contains the results of the instrumental-clinical exam, diagnosis, the treatment plan, and the results of the treatment by the skeletal mobilized partial dentures.

Results: It was confirmed that the individualization of the construction of the mobilized partial dentures presents more aspects which need careful evaluation of the clinical picture peculiarities, partial protein field, and knowing the stabilization mechanism of the partial dentures. The mobilization of the partial dentures, including and those skeletal, are determined by a range of factors: occlusal forces, gravity, traction of the sticky elements, the mobility of the soft tissue around the protein field. Displacement of the dentures has a complex character and produce according to a straight or circular trajectory. For the contraction and limitation of the amplitude of these displacements as is it possible, there are used systems of maintenance, support and stabilization with the direct action as the indirect means of maintenance.

Conclusion: Planning the means of maintenance with direct and indirect action and their topographical location is based on the evaluation of the biomechanics of the partial denture displacement, on one hand, and morphological conditions of the protein field characteristic for this case.

Keywords: SMPD (skeletal mobilized partial dentures), stabilization, tipping, indirect means.

19. POSTCOMBUSTIONAL SCAR DEFORMITIES OF THE HEAD AND NECK AT CHILDREN

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Introduction: Burnings represent severe trauma injuries both through the development of the skin restitution process and scarring sequelae, often manifested for the rest of the life. A current problem of the pediatric combustiology department is justifying the effective rehabilitation tactic of post-burn convalescent individuals. The vast majority of patients (75%) who suffered from serious burn injuries need conservative treatment, every second patient requiring different reconstructive-restorative surgical interventions. The reconstructive and esthetic pediatric surgery at children with postcombustional scar deformities are based on various surgical treatment methods.

Purpose and objectives: The assessment of treatment methods applied in removing post-burn scars of the head-neck region at children and estimation of their clinique efficiency.

Materials and methods: In this study was analized and investigated a sample of 50 childrens' medical records with burn injuries with ages ranging from 0-18 years hospitalized in the Public Clinical Hospital "Emilian Coțaga".

Results: The purpose of the reparatory surgical treatment consists in restoring the anatomic structures and creating the optimal physiological conditions for an intact functionality. The

The total protein content was assessed using Lowry method, in order to avoid nucleic acids interferences. The method was validated according to the

EMA/CHMP/EWP/192217/2009 "Guideline for bioanalytical method validation".

Conclusion: A controlled method for the generation and a validated method for the quantification of protein carbonyls using BSA as a model, with spectrophotometric assay were developed. The methods can be further used for human plasma protein assay. Also, it could be useful for the development of a new capillary electrophoresis method for protein carbonyls assay.

Keywords: Protein carbonyls, oxidative stress, spectrophotometry

10. SPECTROPHOTOMETRIC DOSING OF BETA CAROTENE IN TABLETS METHOD VALIDATION

Drumea Maria, Podgornii Ana

Scientific adviser: Uncu Livia, PhD, associate professor, Department of Pharmaceutical and Toxicological chemistry, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chişinău, Republic of Moldova

Introduction: Validation is a verification methodology, compliance and accreditation of validity as a method of scientific analysis. This methodology aims to demonstrate that the analysis method corresponds to the utilization for which it was foreseen, and to the parameters of validation in accordance with regulatory organizations. It is now recognized that no drug substance or drug can enter the European and American market without being accompanied by corresponding validation folder. The results of this study will serve as support in concluding validation methods report for the determination of the active principles of EUROSEPT product.

Materials and methods: The study was conducted on lozenges EUROSEPT, series 041211 made in December 4th, 2012 and valid until 12.2014. 1 tablet contains: active substances: ascorbic acid, eucalyptus essential oil, Tolu balsam, β -carotene; auxiliary substances: aerosil, corn starch, talc, magnesium stearate, stearic acid, citric acid, aspartame, sorbitol, lactose. In the process of dosage methods validation the following parameters were analyzed: specificity, precision (repeatability, reproducibility), linearity, accuracy. Spectrophotometric dosage method was performed by using scanning spectrophotometer double perchin Elmer Lambda 25 UV-VIS.

Results: Comparative analysis performance of the validation parameters were done, according with the European and international regulatory organizations: ISO, FDA, ICH, USP. Empirical results expressed through absorbance value were used for reconstruction of five calibration graphs used for the completion of the final one. The correlation coefficient of linear regression model is 0.9997, which shows that the experimental points approximate and arrange around the regression line according to experimental conditions stipulated in the MFT. The calibration graph is an average of all data points, which is characterized by a relative error less than 2%. Standard deviation of residuals, standard deviation of intercept and slope values are less than 0.5%, which indicates that the calibration chart can be used to determine the specificity of the dosage method. At the maximum absorption of 454 nm, for the solution obtained in the placebo-controlled trial were not observed significant absorbance values, which indicates that the secondary constituents do not interfere the procedure of the active substances quantification (ascorbic acid, eucalyptus oil, balm Tolu) of the reconstitute pharmaceutical form. Statistical obliquity value does not exceed the 1.5%, which demonstrates the accuracy of the spectrophotometric dosage method of beta-carotene in the visible domain. The correlation coefficient r^2 is 0.9984, which indicates that with the change in the amount of beta-carotene concentration of 80-120%, the dependence of absorbance versus concentration signal is one almost linear.

Conclusion: Spectrophotometric UV-VIS validation method of β -carotene dosage within the preparation EUROSEPT was performed, according to validation parameters: linearity, repeatability, reproductibility, specificity, accuracy, according to regulatory organizations.

Keywords: Validation, Spectrophotometry UV-VIS, Eurosept, β -Carotene

antioxidant fixed for each individual person, we can be more resistant to stress, focus and greater power of concentration and mental activity. The aim was to evaluate research conducted medicinal plants with antioxidant action, given the increasing incidence and prevalence of many diseases in Moldova pathologies such as cardiovascular, endocrine and cancer are influenced by the presence of oxidative processes.

Materials and methods: Medicinal plants with antioxidant activity were selected based on scientific publications, species were identified by Flora Identification Manual for the Republic of Moldova and reference pharmacopoeias. Were characterized antioxidant active principles responsible for the action and assessed phytopreparations by State Drug Nomenclature Moldova: vegetable drugs, medicinal species, phyto antioxidant action. Was evaluated, also, legal status on their release from pharmacies (OTC / Rx) and their presence in pharmacies in Moldova.

Results: Antioxidants herbs that was evaluated contains: vitamins, flavonoids and tannins in amounts large or small, exhibiting antioxidant by trapping free radicals. Antioxidants act by giving electronic and completing the last layer of free radicals, which are not deficient in electrons, loses its harmful action. Also, flavonoids potentiate the action of other antioxidants, including vitamins E, A and C. We note that among medicinal plants with antioxidant action, rank: Rosa canina L.- 14 medicinal products, Taraxacum officinale Web. - 10, Phaseolus vulgaris L. - 6, Cynara scolimus L. - 5, Vaccinium myrthillus L. - 4, Hippophae rhamnoides L. - 4, Cichorium intybus L. - 4, Centaurea cyanus L. - 3, Potentilla erecta L. - 2 and Aronia melanocarpa - 1.

Conclusion: The revaluation result phytopreparations after Nomenclature, we find that in 6350 registered products, 53 exhibit antioxidant, of which: 2 vegetable products, 17 medicinal species, 10 phytopreparations monocomponent and 24 phytopreparations multicomponent. After the release status of the pharmacy, we find that 95% are part of the OTC, 5% is released under doctor's prescription, and their presence in pharmacies is 53%.

Keywords: Antioxidants, phytopreparations, medicinal plants

9. SPECTROPHOTOMETRIC ASSAY OF PROTEIN CARBONYLS IN HUMAN PLASMA

Dima Ines

Academic adviser: dr. Purdel Carmen Nicoleta, CS II dr. Ilie Mihaela, UMF Carol Davila, Bucuresti, Facultatea de Farmacie

Introduction: The oxidative stress represents the aggression produced at the molecular level by the imbalance between pro-oxidant and antioxidant agents, with severe functional consequences in all organs and tissues. An overproduction of reactive oxygen species (ROS) results in oxidative damages especially in proteins (the main target of ROS), as well as in lipids, or DNA. A great effort has been undertaken to assess the biomarkers of protein oxidative injury, most cited being the quantitative assay of protein carbonyls, nitrotyrosine levels, GSH level and/or GSH/GSSH ratio. The present study aims at finding a robust spectrophotometric method to quantify the protein carbonyls in human plasma. The study model was represented by bovine serum albumin (BSA), which was subjected to different oxidative damage conditions, in order to be carbonylated.

Materials and methods: Three hydroxyl radical generating systems were investigated: potassium ascorbate / ferric chloride, ascorbic acid / ferrous sulfate and hydrogen peroxide / copper sulfate. All systems were applied to BSA solutions for 10 to 24 h at 37 Celsius degrees. After degradation, the protein carbonyl levels were evaluated by means of a modified Levine's method, using the derivatisation with 2,4-dinitrophenylhydrazine. The carbonyl content was expressed in mg carbonyls/mg proteins. An ABL&E-JASCO model V 530 spectrophotometer was used throughout the experiments.

Results: The best yield for carbonyl generation was induced by potassium ascorbate / ferric chloride system, after 24 h degradation time. The carbonyl proteins pellets are separated only at centrifuge speeds higher than 5000 rpm, with an optimum at 7000 rpm, at 4 Celsius degrees. The protein carbonyls are stable in the BSA solution only for a short period (hours). Levine's method was modified by replacing the solubilisation in guanidine hydrochloride with 1 M NaOH solution.

7. MANAGEMENT ON DETECTION AND EVALUATION OF MEDICATIONS ADVERSE REACTIONS

Găleanu Corina

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Introduction: The adverse reaction represents an unintentional and harmful response to a medication that normally occurs during administration of different doses to a patient for prophylaxis, diagnose, or disease treatment, as well as in case of a physiological function modification, being at the same time a damaging and unintentional response determined by a medication. Pharmacovigilance is a scientific discipline which studies the safety of medications through detecting, evaluating, monitoring and preventing the adverse reactions, as well as other problems related to drugs. It has as a goal to monitor the frequency of such known reactions, so as it can evaluate and provide the risk-benefit report for the most used medical remedies.

Purpose and objectives: The study of incidence and importance of detection, evaluation, treatment and prevention of adverse reactions. Establishment of adverse reaction role in regard with the clinical evolution of various diseases. Appreciation of adverse reactions incidence. Elucidation and presentation of the side effects impact on the body. Establishment of various methods/mechanisms for fighting against and preventing adverse reaction.

Materials and methods: For running the research and achieving the abovementioned objectives, the communication files of the adverse reactions received by the Section of Pharmacovigilance and Rational Use of Drugs within the Agency of Drugs and Medical Devices were deeply researched and evaluated. Such materials refer to the period between 2012 and 2013, comprising 180 and 115 reporting files. All such files were received, analyzed, registered in the adverse reactions data base of medications and other suspected pharmaceutical products. Adversary reactions evaluated cases were communicated to the Uppsala Monitoring Center, with the purpose of evaluating adverse reactions, as well as determining their impact on the life quality of patients.

Results: In the studied reporting files the predominance of adverse reactions in the third and fifth life decades can be noticed; a greater incidence of the oral administration of drugs and the predominance of solid pharmaceutical formulas can be distinguished (tablets, powder, capsules). The most frequent reports were the adverse reactions related to the following pharmaceutical groups of medications: anti-tuberculosis, antibiotics, uterotonics, antihypertensives. Among the countries which caused adverse effects prevail India, followed by the USA, Germany, Turkey, Moldova, Romania, Norway and Argentina. The clinical picture of the allergic reactions is prevailed by the cutaneous syndrome (pruritus, hyperemia, eruptions, rash wounds), dyspeptic syndrome (nausea, vomiting, diarrhea, constipations), astheno-vegetative syndrome (headache, fatigue).

Conclusion: Adverse reactions produce negative effects on the further patients' life quality, with a medical-economic impact. The incidence of adverse reactions varies and is specified for each medication group. Undesirable medications effects can cause allergy in the human body, can decrease the effect of other medical remedies that are being administrated at the same time, can generate into a depressive state or fear to further administration of drugs. The methods to be used in fighting against adversary reactions and their prevention consist in identifying them as soon as possible, detailed analysis of the causes that could favor their occurrence and, of course reporting them to the Agency of Drug and Medical Devices.

Keywords: Adverse reaction, medication

8. UTILIZATION OF ANTIOXIDANT MEDICINAL PLANTS

Gurschi Elena

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Introduction: Nature provides us with the most effective remedies that stimulate the functioning of the human body. By knowing and using herbs in the formulation and dose

pharmaceutical forms based on artichoke extract. However the most common were found to be the solid pharmaceutical forms tablets and hard capsules. Also as a surprise the main solvent for extraction was developed to be the water which came in contrary with the fact that biologically active compounds of phenolic structures, contained in artichoke, are more soluble in highly polar organic solvents. For maintain the production constant improvement of extraction technology is required.

Keywords: Artichoke, extract, pharmaceutical form, tablet

6. INFLUENCE OF MEDIA COVERAGE ON RATIONAL DRUGS USE

Derli Tatiana

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Introduction: According to the concept of rational use of drugs, the patient should follow the drug treatment according to clinical indications, in doses that correspond to individual characteristics over a period of time and cost efficiency. Advertisements of medicines made by physicians, pharmacists, news and television have a major effect on the rational use of drugs.

Materials and methods: A descriptive analysis of coverage media on the rational medicines use in different countries has been carried out.

Results: Many advertised drugs cause complications for patients. This process involves target groups such as doctors, pharmacists and patients, the last are the ones who suffer the consequences imposed by the misuse or unjustified use of drugs. Prescription drugs that claim to have therapeutic effects that haven't been proven in clinical trials, dispensing of drugs without prescription, excess of drug advertising both on TV, magazines, and newspapers and in brochures at the pharmacies and on the streets - are the main problems of the Republic of Moldova. In many studies, information about the effects of a drug overdose promoted in Mass Media was found, where self-poisoning with paracetamol increased by 17% in the broadcast week and 9% in the second week. Interviewers admitted that they were influenced by the episode to take an overdose. Using paracetamol for overdose doubled among viewers (Casualty) after the episode, which shows a negative effect of drug advertising on the population. Another study also made in the UK suggests that the media convey a negative impression that „demonizes" users. Another research by the UK Drug Policy Commission (UKDPC) has shown that nearly two thirds (64%) of UK adults agreed with the statement that "People with a history of drug addiction are too often influenced by the media". Advertising drugs for weight loss or the first symptoms of colds during cold season of the year lead to the inefficient use of drugs, overdose or self-medication but are nonetheless good marketing strategies that bring considerable revenue to the pharmaceutical companies. Based on the study results, we can assert that pathways of media influence are: media→ knowledge→ behavior (learning by focal individuals); media→ beliefs→ behavior (persuading focal individuals); media→ skills→ behavior (instructing focal individuals); media→ awareness→ behavior (triggering focal individuals); media→ info-seeking→ behavior (stimulating focal individuals); media→ knowledge→ influence (learning by influencers); media→ problem salience→ policy (activating policy-makers). Also we could talk about positive effect of the media. With more new and expensive drugs, decisions on public funding will become increasingly difficult. The media will have an important role in enhancing public understanding of the issues around resource allocation. Specialist journalists, guidelines and checklists may help reporting.

Conclusion: Information is spreading rapidly and it's becoming a serious problem in the Republic of Moldova. This raises questions on whether the media is an appropriate way to disseminate such information. Research and thorough analysis will determine the permissible limits of drug advertising in order to prevent harm such as irrational drug use but to inform pharmacists, doctors and patients about the appearance of new effective and safe drugs.

Keywords: Media coverage, rational drugs use

Materials and methods: Experiments were performed on 30 Wistar rats. During the research was used the combination of two antimicrobial agents: ampicillin and metronidazole, 2% glutaraldehyde solution in a phosphate buffer (PBS), 1% - ethanol solution of OsO₄, mixture of epon and araldite, toluidine blue. In addition the microtome LKB-III, MBI-6 microscope. Statistical analysis was performed using Student t-test.

Results: We have investigated some structural parameters of the small and large intestine, and activity of two intestinal peptide hydrolyses in rats after ampicillin and metronidazole administration during 3 and 5 days. After 3 days of antibiotic administration, the decrease in the weight of mucosa in the small intestine was accompanied with a reduction in the villous height and width in this part of the intestine, and in the weight of mucosa in the colon. At the same time the number of goblet cells in the small intestinal epithelium was increased. Specific activities of aminopeptidase M and glycyl-L-leucine dipeptidase (mmol/min per g) in the mucosa of the small intestine were increased. The total activities (mmol/min calculated per a part of the intestine) of the same enzymes did not change. The administration of antibiotics during 5 days resulted in an increase of specific activity of aminopeptidase M in the mucosa of the proximal part of the small intestine. In the chyme of the small intestine and colon, activities of the same enzymes (mmol/min calculated per a part of the intestine) were increased on the third and fifth days of the antibiotic administration.

Conclusions: Thus, the application of ampicillin and metronidazole within 3—5 days causes a disturbance of the structural and functional parameters in the small and large intestines which is best seen on the third day of the drug administration.

Keywords: Antibiotics, dysbiosis, microbiota, structural analysis, intestinal digestive enzymes, small intestine, large intestine

5. EVALUATION OF PHYTO PRODUCTS OBTAINED FROM ARTICHOKE *CYNARA SCOLYMUS* L. ON PHARMACEUTICAL MARKET

Ciobanu Cristina

Academic adviser: Diug Eugen, Ph.D., Professor; Calalb Tatiana, Ph.D., Associate Professor, State medical and Pharmaceutical university "Nicolae Testemițanu", Faculty of Pharmacy, Chisinau, Republic of Moldova

Introduction: Artichoke was used as a food and medicine by the ancient Egyptians, Greeks, and Romans. Nowadays artichoke is widely cultivated in Mediterranean countries. Worldwide ethnomedical uses of artichoke are for bile insufficiency, gallbladder disorders, high cholesterol, liver disorders, hyperglycaemia, detoxification, dyspepsia, jaundice, nausea. Due to clinical proofs of its therapeutic benefits artichoke was introduced in cultivation in the Collection of Medicinal Plants of the Centre for the Cultivation of Medicinal plants of the State Medical and Pharmaceutical University "Nicolae Testemițanu".

Purpose and objectives: This study aimed to analyze the share of phyto products obtained from artichoke's raw materials in European countries and to estimate the main pharmaceutical forms of drugs.

Materials and methods: assessment literature review of the range of drugs, concept-comparative, structure-systemic review, statistics.

Results: The survey is base on published data of marketing authorization in European countries of medicines containing artichoke. The presence of this medicines are for more than 30 years on the European market and were develop accounting for 11 European countries: Austria, Belgium, Bulgaria, Germany, France, Hungary, Poland, Slovakia Spain, Romania, United Kingdom and also in Republic of Moldova. Sate moldovan nomenclator database of Agency of Medicine includes 3 registered herbal medicinal products containing *Cynarae folium* as a single drug and 1 combined product. Although solid dosage forms (tablet and hard capsules) are considered biopharmaceutical most difficult forms constitutes 80% of registered products. The registered liquid pharmaceutical forms are solution for oral intake, fluid extract and tincture, their range submit considerably compared with solid forms. For example the tincture (1:5) is registered only in one country, in Poland.

Conclusions: As a result of the survey was determined that in different countries are used various

WHO. The problem becomes even more complicated due to the fact that vegetal drugs are used concomitantly with medicines as patients and even doctors do not always pay the necessary attention to this problem considering medical herbs inoffensive and not being harmful for health.

Purpose and objectives: is to analyze bibliographic data bases which refer to the significance of pharmacokinetic interactions and the consequences of the associated use of vegetal drugs and medicines.

The results and discussion: Analysis of literature showed the existence of hundreds of experimental and clinical studies, of cases referring to interactions of approximately 50-85 of medical herbs and drugs, many of which demonstrate clinical significance. It was proved during this research that the pharmacokinetic interactions take place at different levels of absorption, distribution, metabolism and elimination. A particular interest for medical practice is the concomitant utilization with medicines with drugs from rattle (*Hypericum perforatum*), grapefruit (*Citrus paradisi*), ginseng (*Panax ginseng*), ginkgo biloba (*Ginkgo biloba*), garlic (*Allium sativum*), echinacea (*Echinacea purpurea*), thistle (*Silybum marianum*) etc.. The most important pharmacokinetic interactions were reported at the level of the cytochrome P-450 activity and of the conveyors (P-glycoprotein etc.). It was established that the grapefruit, echinacea, green tea, garlic, milk thistle, licorice, chamomile, lemon Chinese are inhibitors of P-450 cytochrome (CYP 1A2, 2C9, 2C19, 2D6, 2E1, 3A4 etc.), while the *Hypericum perforatum*, *Panax ginseng*, *eleuterococcus*, *rosemary*, *green tea*, *Echinacea purpureae* manifested as inductors. Some of the plants (echinacea, green tea, ginseng etc.) had an effect on CYP 3A4 in liver and as inhibitor of isoenzyme respectively in the intestine. Recent studies showed an important influence of medical herbs on the activity of transporting systems, especially on P-glycoprotein, located in the intestine, liver, kidney, hematoencephalic barrier, placenta, testicles. The P-glycoprotein acts as an efflux pump, and its induction or inhibition will influence the absorption, transport and the elimination of drugs.

Conclusion: Medicinal herbs when used concomitantly with medicines will show pharmacokinetic interactions with essential changes of the level of medicines in the body and respectively of therapeutic effects. These data require adequate information given by the doctors, pharmacists and patients, with their detailed description in the instructions and medical literature as well.

Keywords: interactions, medicinal herbs, pharmacokinetic

4. INFLUENCE OF ANTIBIOTICS ADMINSTRATED "PER OS" ON INTESTINAL MUCOSA

Borsciova Inessa

Academic advisers: **Uncu Livia**, PhD, Department of Pharmaceutical and Toxicological chemistry, Drugs control; **Lozovanu Svetlana**, Associate professor, Department of Human Physiology and Biophysics, State Medical and Pharmaceutical University "Nicolae Testemițanu", Republic of Moldova

Introduction: According to academician A.M.Ugolev, the bacterial flora is a necessary attribute of the existence of complex organisms. It is known that the most numerous and complicated by its composition population of bacteria is in the gastro-intestinal tract, particularly in its lower regions. There were made significant advances in the study of the intestinal microbiota and its functional role in humans and animals in recent decades. There is also shown that changing normal intestinal microbiota composition, (the so-called intestinal dysbiosis) as during the administration of antibiotics, leads to a number of disfunctions with severe consequences for the organism.). Literature contains very comprehensive information about the changes in composition of the bacterial flora under the influence of various antibiotics. Although it has very little information about the impact these drugs have on the final stage of the digestive process, which largely determines the overall body metabolism and homeostasis. The purpose of this work was to investigate during the experiments on rats, the effects that Ampicilline and Metronidazole (antibiotics which are widely used in clinic) have on some indicators of the general organism condition, structure of a small and thick intestine, and activity of two intestinal enzymes: transmembrane M aminopeptidase and predominantly of intracellular glycyL-L-leycindipeptidaze, which are carrying out final stages of hydrolysis of proteins. Also there was collected data about the microbiological resistance to these drugs.

2. PHARMACODYNAMIC INTERACTIONS OF MEDICINAL HERBS AND DRUGS

Bacinschi Georgel, Beşliu Alexandrina

Academic adviser: Gonciar Veaceslav, MD, PhD., Professor, Head of the Department of Pharmacology and Clinical Pharmacy, State Medical and Pharmaceutical University „Nicolae Testemiţanu”, Republic of Moldova

Introduction: Phytotherapy is increasingly evident in the complex treatment of diseases due to the elucidation of the active compounds from plants with beneficial pharmacological effects. The creation of a scientific base on rational use of medicinal herbs opens new prospects for the pharmacotherapy improving. Therefore, the issue of interactions between drugs and plant drugs in terms of synergism and antagonism becomes current for arguing security and safety of their association. Data on such interactions are minor and dispersed, as they are more difficult due to the varied and rich content of active ingredients from plants. Interactions between herbs and drugs can be detected in pharmacotherapeutic and toxicological aspect.

Purpose and objectives: is the bibliographic study of the pharmacodynamic interactions between medical herbs and drugs, their reflection in the training process.

The results and discussion: Pharmacodynamic studies of herbal drugs and of their active principles have demonstrated the presence of a variety of pharmacological effects (anti-inflammatory, immunostimulant, antioxidant, antimicrobial, sedative, anxiolytic, antispasmodic, etc.). It was determined that the association with drugs can have unpredictable consequences, both therapeutic and toxicologic. Thus, pharmacodynamic interactions can be achieved by: drug interaction with receptors, allosteric modulation of receptor sites; influencing mediator systems (release, uptake, synthesis, metabolism), modifying the activity of enzymes, changing the activity of organs and systems, the development of liver, kidney disturbances etc. Thus, St. John's wort drugs manifest antidepressant action by inhibiting the norepinephrine, serotonin, dopamine reuptake. However, they also induce adverse effects in combination with antidepressants as selective inhibitor of the reuptake of these neurotransmitters. Valerian benzodiazepines shows the same effect by modulating the GABA - ergic system. Echinacea, ginseng, by their phenolic triterpenes, flavonoids, saponins, polysaccharides determine the immunomodulatory effect which can produce contradictory effects in patients under immunosuppressive organ transplantation. Garlic drugs develop multiple metabolic effects, including the inhibition of lipid-lowering hydroxy-methyl-glutaryl - CoA - reductase for stimulation of the efficiency of statins. The associated use of these compounds may increase the incidence of rhabdomyolysis due to increased concentration of statins as a result of pharmacokinetic interactions. It is necessary to mention that the result of pharmacokinetic interactions, particularly produced by the induction and/or inhibition of cytochrome P-450 and transport systems will be characterized by the amplification and/or decrease of the pharmacological effects and adverse reactions.

Conclusion. The associated use of drugs with medicinal herbs for the treatment of diseases requires strict monitoring of the efficiency and safety through the possible pharmacokinetic and pharmacodynamic interactions. The information about the consequences of these interactions must be brought to the attention of physicians, pharmacists and patients in order to ensure a rational pharmacotherapy.

Keywords: herbs, phytotherapy, interaction, pharmacodynamy

3. PHARMACOKINETIC INTERACTIONS OF MEDICINAL HERBS AND DRUGS

Besliu Alexandrina, Bacinschi Georgel

Academic adviser: Scutari Corina, M.D., associate professor - Department of Pharmacology and Clinical Pharmacy, State Medical and Pharmaceutical University „Nicolae Testemiţanu”, Republic of Moldova

Introduction: The utilization on a large scale from 30 to 85% of basic and active compounds from plants according to WHO data is an actual problem of modern medicine due to the possible interactions with drugs. International bodies (WHO, FDA, EMEA, EFSA) are much concerned about the spreading of medical herbs marketing which do not contain a proper reference material and/or not being certified by the

PHARMACY SECTION

1. LEGISLATIVE REGULATION OF ORPHAN DRUGS IN CERTAIN COUNTRIES

Isac Anastasia

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Introduction: The rare diseases that are treated with orphan drugs is a global problem of XXI century. The limited health insurance budgets and economic inability of patients with rare diseases to pay for medications, improves to revise economic affordability and physical accessibility of orphan drugs through reimbursable drugs system of national compulsory health insurance company.

Materials and methods: A descriptive analysis of orphan drugs legislation in different countries in order to determine potential methods of adjusting the normative legal framework in the Republic of Moldova (RM) has been carried out.

Results: The low prevalence is the basic characteristic that describes rare disease. In the European Union (EU), rare diseases are defined as life-threatening or chronically debilitating diseases with prevalence of 5 out of 10,000 individuals or less. The EU defines an orphan drug as either a medicinal product intended for a life-threatening or chronically debilitating rare disease or a medicinal product that would not be developed without incentives because its sales are unlikely to generate sufficient return on investment. An additional requirement to qualify a drug as orphan as orphan drug is the absence of a satisfactory method for the diagnosis, prevention or treatment of rare disease or, if there is such a method, the drug will have a significant effect to the patients suffering from the disease. Availability of orphan drugs presents obstacles caused by the decision-making process of national health insurance companies on their pricing and reimbursement. There are about 8,000 known rare diseases in the world, 75% of those affecting children. While the diseases are rare, patients are numerous, especially children. As a response to this situation, states impose programs to stimulate the development of orphan drugs. In 2000, the EU introduced new legislation Regulation (EC) No 141/2000, which establishes a centralized procedure for orphan drugs designation and implement incentives for research, development and marketing for them. Pharmaceutical companies with a designation in this area, take a great advantage: tax exemption, market exclusivity for a period of 10 years for designated products, scientific support for marketing authorizations and the possibility of a Community marketing authorization. In the U.S., after confirmation of an orphan drug, Official Development Assistance offers three main incentives: federal funding of grants and contracts for clinical trials, tax credits for clinical trial costs; granting the exclusive right to market the orphan drug for seven years. In RM National Health Insurance Company, beginning with 2013, introduced in the list of reimbursed drugs 8 medications intended to ameliorate the suffering of patients with rare diseases: epidermolysis bullosa (methylprednisololum, clemastinum, desloratadinum), myasthenia gravis (pyridostigmidum bromidum) autoimmune system diseases (prednisololum, methylprednisololum, methotrxatum) and mucoviscidosis (pancreatinum).

Conclusions: Orphan drugs are the most accessible ways to ameliorate the health of patients with rare diseases. The results of this study emphasize the worsening of this problem, especially in middle country, such as RM. In this context the present study will continue with a complex analysis of the current situation in RM.

Keywords: Orphan drugs, rare diseases, reimbursement system, reimbursable drugs

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Levocarvit

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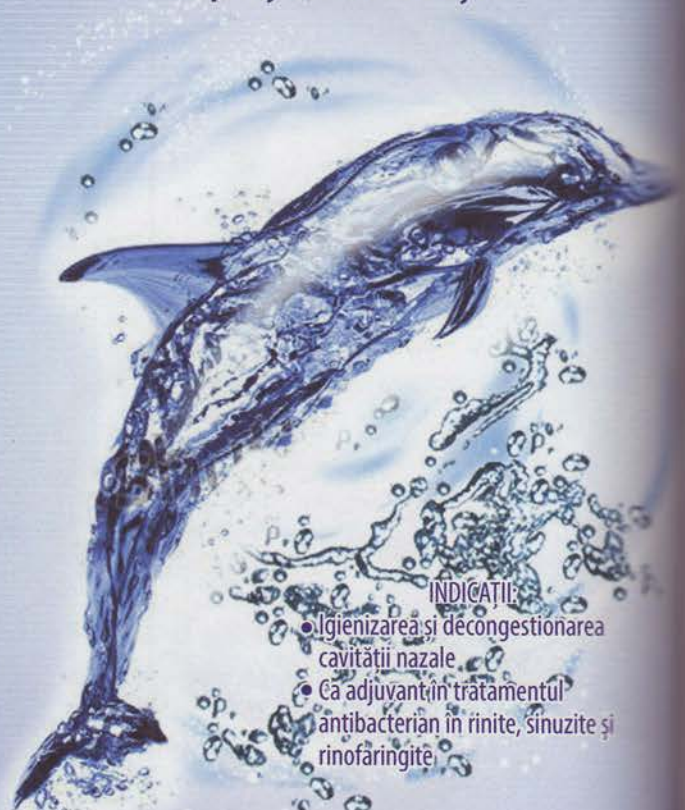
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explains signs of temporomandibular joint disorders. It reviews the symptoms, causes and diagnosis of TMD in patients with migraine.

Purpose and Objectives: examination of patients with migraine and recognizing the temporomandibular dysfunction of them, determine the signs of TMD and analyzing the obtained results.

Materials and methods: We investigated 15 patients, aged 18-40 years with a diagnosis of migraine, previously confirmed neurologists. Patients were applied personality tests: SCL-90, Beck and Spilbergher to analyze the psycho-emotional status of these patients and for detecting temporomandibular dysfunction questionnaire was applied type "screening" proposed by McNeill.

Results: Investigated in 15 patients with migraine, 6 patients (one man and five women) showing signs of TMD. By clinical examination and investigation of patients with questionnaire type "screening" proposed by McNeill, we determined following clinical signs of TMD:

- joint noises (clicking, popping, grating, or crepitation);
- masticatory muscle pain (palpation)
- pain in the TMJ;
- pain when chewing, wide opening of the mouth and during yawning.

All patients who experienced these signs of DTM had migraine on the same side.

Conclusion: Migraine and temporomandibular disorders (TMD) are highly prevalent conditions that frequently coexist in the same patient. The relationship between migraine and TMD is complex. Migraineurs often have pain in the TMD area; TMD sufferers, in turn, often experience headaches in addition to the pain in the jaw. Finally, migraine and TMD are comorbid, and the final phenotype of patients with the comorbidity may represent the aggregated contribution of both.

Keywords: temporomandibular joint dysfunction (TMD), signs and symptoms of TMD, migraine

degree of teeth, the thickness of buccal and oral alveolar plates, the anatomy of dental roots, the cervical outline and the relative position of cemento-enamel junction.

Conclusion: The anatomical form of interdental septa determines the thickness of the cribriform plates, fact that plays an important role in the pathogenesis of a specific pathology. The rarefaction of the radiologic design in the marginal region of the septa is an initial, very important sign of the periodontal disease. There are some features of the radiologic image of normal septa that represent their anatomical particularities, and they show no pathological changes.

Keywords: Normal interdental and interradicular septa, periodontal disease, cemento-enamel junction

28. USING SONIC RETRO TIPS IN THE RETROGRADE ENDODONTIC TREATMENT

Scutelnic Vladimir, Bolun Radu

Academic adviser: **Fala Valeriu**, M.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: The retrograde endodontic treatment of periapical periodontal diseases in classical vision shows little chance of success. This is explained by the use of inappropriate tools, inadequate visibility, frequent postoperative complications and failures that resulted in the extraction of the tooth. This changed radically with the introduction of the microscope, of micro tools, sonic and ultrasonic tips and plug biocompatible materials.

Purpose and Objectives: To evaluate preliminary clinical results of the use of SONIC retro tips in retrograde endodontic treatment and estimate the surgical access to the root apex and capacity of retrograde cavity preparation.

Material and methods: The study included 10 patients who had periapical periodontal disease at one tooth, 10 teeth underwent apical resection. While the clinical and instrumental examination, orthopantomography and dentoparodontal radiography were made, computed tomography in case of necessity.

Results: Following clinical examination data, we have set limits of periapical pathology, the condition of neighboring teeth, the condition of mucosa. Access to the operative field was superior in 100% of patients. On postoperative contact radiographs, the length of retrograde obturation and the length of resected tip were counted. During the 6 months period after surgery, 1 from 10 patients was complaining of periodical pains and there was sensibility around the root tip projection on palpation. According to the clinical and radiographic criteria, in 9 patients have obtained good results and only one of 10 has failed.

Conclusion: The tips simplify the surgical access to the root apex and have a good capacity of preparation. Preliminary clinical results indicate excellent progress at 6 months postoperatively. With these tips intra and postoperative aspects in apical resection are considerably improved for doctors and patients.

Keywords: periapical periodontal disease, retrograde preparation

29. TMJ DYSFUNCTION IN PATIENTS WITH MIGRAINE.

Arnaut Diana

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Moldovanu Ion, M.D., Ph.D., Associate Professor, Department of Neurology, University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Temporomandibular joint disorders, or TMD, is a constellation of the group of orofacial pain, that includes masticatory muscle, articular conditions or both. This reference summary

postraumatic, postoperative defects, congenital malformations, etc. In order to satisfy the ideal goals of dentistry, especially of the implant-prosthetic rehabilitation, bone regeneration procedures are performed. Any implanted material that alone or in combination with other materials promotes a bone healing response by providing osteogenic, osteoinductive or osteoconductive properties is called a bone graft.

Purpose and objectives: Enhancing the efficiency of rehabilitation of the patients suffering from maxillary bone loss, on behalf of literature and histological analysis and dynamic evaluation.

Materials and methods: The study is based on 52 clinical cases, in which patients suffer from different degrees of maxillary atrophies, defects and deformations. The patients were treated using different procedures: autogenous, synthetic or combined autogenous/synthetic bone grafting. Bone samples were taken from 4 of the patients involved in the study, for histological analysis.

Results: The study looked for the analysis of the resorption rate for each of the two grafts. We were able to evaluate only the resorption rate of the augmented autogenous bone. Dynamic clinical evaluation associated with mathematic calculus was made, coming to a result that resorption can grow up till 50% of the total volume of the reconstructed site. The resorption rate of the augmented alloplastic grafts, clinically was impossible to evaluate, because of the changes in volume that occur once the grafts are being placed in the receiving site. As an alternative analysis of the question above, bone samples were taken from patients, for further histological analysis. The histological results - microscopic images at the operational site in a time frame of 4 months, 7 months and 7 years show structures composed of synthesized new bone, medullary spaces and residual alloplastic biomaterial in a different quantity, depending on the range of time elapsed since the surgical procedure was performed.

Conclusion: In order to delimit the ideal bone substitute for each situation, the bone substitute must be selected based on factors like: systemic health of patients, the elected surgical procedure, the osteogenic potential of the host residual bone, the morphology of the defects, etc.

Keywords: implant-prosthetic rehabilitation, augmentation, bone regeneration, autogenous bone, alloplastic graft

27. THE PARTICULARITIES OF ANATOMICAL SHAPE AND STRUCTURE OF NORMAL INTERDENTAL AND INTERRADICULAR SEPTA

Zețu Daniela

Academic adviser: **Sârbu Sofia**, M. D., Ph. D., Associate Professor, Faculty of Dentistry, Department of Therapeutic Dentistry, University „Nicolae Testemițanu”, Chișinău, Republic of Moldova

Introduction: Changes in the anatomical structure of interdental and interradicular septa may consist the basic signs of development of different pathologies. Their different shape in dependence of their anatomical situation on dental arch influences differently the appearance of periodontal disease. Also, there are some anatomical particularities that may be treated like being pathology, and vice versa, there are initial changes that should be treated like signs of a specific pathology, but doctors neglect them.

Purpose and Objectives: Studying the anatomical types of shapes of normal interdental and interradicular septa on different groups of teeth, factors influencing the change of their form and structure and also the initial radiologic signs of periodontal disease.

Materials and methods: The project is based on 280 radiographs of both normal and affected septa of people of different age and sex.

Results: There have been identified four major forms of interdental septa: the rounded form, the crescent form, the lance shaped septa, the dissected form. It is also important that in the dissected form, the points of the septa may not be at the same level, in this way results another type which is tread shaped septa. Among the 280 radiograms, just 40 of them were found presenting normal septa, without pathological changes, which consist 14.2%. Consequently, among all the radiograms presenting normal septa there have been detected 156 (46.98 %) of the crescent septa, 79 (23.79 %) of lance shaped septa, 95 (28.61 %) of rounded septa and 2 (0.6 %) of septa having dissected shape. The major factors that influence the shape of septa are: the size and convexity of the crowns of adjacent teeth, the anatomical position of teeth on the alveolar process, the eruption

indexes of oral hygiene and general health. 3. Paraclinical methods included: radiological methods of investigation and study of medical records.

Results: After collection, analysis of data obtained through the completed questionnaire and clinical, paraclinical examination which underlined the interdependence of the clinical expression of non carious affections, involving hereditary and congenital factors.

Conclusion: As a result of theoretical systematization of clinical information about affections of non carious etiology, we conclude that these injuries are the result of symbiosis of both hereditary predisposition as well as neonatal factors, often having repercussions not only at the stomatognathic system and involvement of different organ systems. The correct diagnosis offers the possibility to achieve a qualitative interdisciplinary treatment of non carious affections and not least the organ systems potentially affected.

Keywords: Affections of non carious etiology, hereditary and congenital factors, interdisciplinary treatment

25. MODERN APPROACHES TO TREATMENT OF FLUOROSIS

luhtimovschi Eugeniu, Eremciuc Natalia

Academic adviser: **Musteata Victoria**, assistant professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Dental Fluorosis represents an endemic affection caused by Fluorine intoxication, mostly as consequence of high Fluorine concentration in drinking water. This pathology presents high interest also in Republic of Moldova, as there are many regions with a high Fluorine concentration in drinking water over established international standards, more than 16 mg/L. Fluorosis treatment requires modern approaches, easy to use at home.

Purpose and Objectives: Comparative study of results, obtained after the whitening treatment with Opalescence and Opalescence (PF) systems, at home.

Materials and methods: Modern methods of Fluorosis treatment include home use of gel whitening systems, applied in a tray. Opalescence and Opalescence (PF) whitening methods are easy, conservative and safe to apply at home with the gel concentrations of 10% , 15 % , 20 %. Our study included 12 patients, residents from regions with high Fluorine concentration in drinking water, which were examined and treated in the Stomatological Clinic of USMF. The patients were divided in two groups according to the whitening system applied: Ist group – treated with Opalescence system (6 patients) and IInd group – treated with Opalescence (PF)-(6 patients)

Results: First group of patients treated with vital whitening system Opalescence presented hyperesthesia of the enamel (3 patients), which disappeared after the treatment interruption, while patients from the second group treated with Opalescence PF didn't present these complications.

Conclusion: According to the aim of our study and analysis of the obtained results, we can state that Opalescence system is a modern, safe and easy to apply at home method of local treatment of the Fluorosis, especially Opalescence (PF) system which besides the carbamide peroxide contains also Potassium Nitrate and Fluorine, reducing enamel sensibility to caries, rising it's resistance, and lowering considerably dental sensitivity during whitening procedures.

Keywords: Fluorosis, Opalescence (PF), treatment

26. BIOMATERIALS USED AS BONE GRAFT SUBSTITUTES

Rață Alina

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Introduction: In daily practice doctors encounter clinical situations in which patients suffer from insufficient hard and soft tissue volume and quality, caused either by edentation or by different

- Group 1: includes 6 women at 1st trimester.
- Group 2: includes 11 women at 2nd trimester.
- Group 3: includes 13 women at 3rd trimester.

A questionnaire was taken from all pregnant women. The examination was done in a dental clinic using periodontal probe and dental mirror, estimating oral hygiene index "OHI" G. Green, J. Wermillion, gingival index by Loë H. and Silness, papillary bleeding index (Mühlemann).

Results: It was revealed that the prevalence of gingivitis was 63,3 % (19 persons) in the studied sample. It was determined that the severity of the inflammation is exacerbating during the 2nd month of pregnancy reaching a peak at the 8th month. Gingival bleeding occurred in 52,6% of cases in the first trimester, and in 47,4 % in the second trimester. The results showed that 31,5% of the total sample had gingival recession and that the affected teeth are upper and lower incisors and canines. Regarding the tooth surface, it appears that facial surface was more affected than the gingival or palatal surfaces. The prevalence of plaque was 73% among all subgroups with non-significant differences. The direct relationship between the frequency of brushing and the incidence of gingivitis gravidarum shows that the condition can be minimized by better oral hygiene. The pregnant women were instructed to use a dentifrice with 0.30% triclosan, an antimicrobial compound. Self-performed tooth brushing with a triclosan/copolymer-containing toothpaste improves the daily plaque control and reduces the gingivitis formation significantly.

Conclusion: The importance of local factors in gingivitis in pregnancy cannot be minimized, but the role played by systemic disturbances due to changes in hormonal balance must be considered. The local treatment in a preventive oral hygiene program from early pregnancy is very important to prevent further progression of any inflammation.

Keywords: pregnancy-related gingivitis, gingivitis gravidarum, prevalence

24. AFFECTIONS OF NON CARIOUS ETIOLOGY AT CHILDREN WITH DISABILITIES

Lozovan Mariana

Academic adviser: Ciobanu Sergiu, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chișinău, Republic of Moldova

Introduction: Affections of non carious etiology are a large group of hard tooth structure damage, which either acts as a separate nosologic unit or combined with various addictions of development and functioning of organs and organ systems. The development of dental tissue injuries are dictated by both endogenous and exogenous harmful factors, as well as certain dysfunctions of dental development that is mainly of a genetic trait. It is necessary that the affections of non carious etiology to be viewed through the prism of the hereditary and acquired anomalies which manifests varied polymorphism in terms of both local and general level. Thus the most vulnerable and most affected group of patients is, unfortunately, children with physical and mental disabilities. They also often are questioned and examined superficially due to the difficulty of working with them or because of ignorance and indifference. R.M. statistics on children diagnosed with primary disability aged under 18 years, namely the category of congenital malformations, deformations and chromosomal abnormalities have been shown to increase from 0.4% to 0.69% in 1000 children, since 2000 until 2012. This statistics emphasizes once again the need to know the interdependence of oral manifestations and dental hard tissue injuries and increased possibility of various affections of organs and child body systems. So non carious affections remain current with their frequency increasing, the peculiarities of development and manifestation of the various groups of patients through specialized assistance system and the lack of universal and effective methods of treatment.

Materials and Methods: For the study, research sample included 24 children with various general and dental disorders (8 children from day center "Dorința", of city Călărași, 7 children from special boarding school of deaf children in the village Hîrboveț, Călărași city, 8 children from special children school with poliomyelitis and infantile paralysis, of Ialoveni). The study used the following research methods: 1. Methodology of journal literature. 2. Clinical methods that include subjective clinical examination, with its parts (accuse, life history), clinical objective, evaluation

skills for each posture allowed to establish the most comfortable postures having the minimal muscle strain and maximal working time.

Conclusion: The most comfortable postures are at 10, 11 and 12 o'clock. Postures at 8 and 9 o'clock are less comfortable for the patient, because the right forearm of the dentist is placed above the chest. The proper use of neutral postures will allow the students to get the right working skills, to enhance the techniques and working quality, to keep and maintain their well-being even from the onset of the practice.

Keywords: neutral posture, patient

22. MODIFICATIONS OF DENTAL PULP ACCORDING ON AGE

Frasineanu Doina

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Introduction: The pulp is a sensitive and richly vascularized tissue which occupies the central cavity, consisting from the chamber, the coronal part and pulp canals, in the teeth roots. The pulp has the defense, nutrition and innervation function. During the life, pulp suffers some modifications which requires the therapeutic approach attention in old patients.

Material and methods: Includes accurate and verifiable facts, selected from literature.

Results: According to the study were observed a number of morphological changes. Besides the reduction in volume, the structural changes in the dental pulp in old patients have been revealed. Emphasized was observed the crossing from richly vascularized and innervated tissue to one with a very poor vascularization and innervation, which was reflected in its accomplished functions. Essentially, aging pulp is similar with aging of connective tissue that leads to sclerosis and progressive atrophy, nutrition and defense loss role. Fibroblasts are transformed in fibrocytes, cells have less cytoplasm and fewer organelles and cytoplasmic extensions. Fibrocytes number progressively decrease according to the age. At odontoblasts level have been determinate the numerical reduction, dystrophic changes occurrence and interruption of "palisade". Cells decreases their volume, the nucleus becomes small, compact and intercellular space increases. Decrease the cell number increases and collagen fibers increases.

Conclusions: Ageing dental pulp represents a complex physiological process, which concerns all the structural components, depending on the tooth is exposed during life. Elderly tooth pulp has a slow metabolic activity, a defense potential and reduced repair power. It is difficult to strictly delimit the pulp changes determination of aging and those which are induced by external factors. In this way partial loss of pulp activity will be taken into consideration during the dental treatment and it requires great caution in the tooth vital prognosis establishment.

Key words: Dental pulp, morphological changes, odontoblast

23. GINGIVITIS IN PREGNANCY

Ionişel Ina

Academic adviser: **Chetruş Viorica**, Associate Professor, Faculty of Dentistry, Department of Therapeutic Dentistry, University „Nicolae Testemitanu”, Chişinău, Republic of Moldova

Introduction: Changes in female sex hormone levels during pregnancy are related to the increased sensitivity to gingival inflammation. This phenomenon, also named *pregnancy-related gingivitis*, *Gingivitis Gravidarum*, usually occurs with an association of dental plaque, and develops more severe forms, in comparison to plaque-induced gingivitis in non-pregnant women.

Purpose and Objectives: Determining the prevalence and severity of gingival inflammation at different period of gestation, estimating Oral Hygiene Indexes.

Materials and methods: The study was based on the examination of periodontal state of 30 pregnant women (18 – 35 years old). The sample was divided according to the trimesters into 3 subgroups:

a way all the risks are related to the patient. The second method is „ In two steps” the tooth implant is fixed into maxillary bone for osteointegration during 3-6 months. After this period of time the doctor must decide if this method is suitable for patient. In such a way only doctor assumes the highest risks concerning successful final result. The secondary difficulties shown by the patients may be: infringement of doctor’s prescriptions before and after the treatment, avoidance to respect personal hygiene and healthy conditions of social surroundings, the great wish of patients for implants without being concerned about contra-indications of this method of Implantology. According to all these facts presented above the large majority of risks are assumed by the doctor. As a solution to solve the main problems, to avoid the conflicts between both parts, to insure the stomatologist and patient against future complications, Bioethics offers some principles. One of them is to sign a special document (an agreement), which confirms that the patient accepts voluntarily the treatment after first-hand acquaintance with professional medical information. An “Informed Agreement” can help us to solve the problems which may appear between the doctor and patient. The lack of this agreement, as a starting point created by the freedom of patient’s self-determination and doctor’s obligations to carry out patient’s wishes, established the arbitration for medical treatment, which in its turn may have penal consequences.

Conclusion: In medicine will always exist the risks and successes concerning the treatment. Dental Implantology is a medical branch with high risks in which the doctor must pave the way for success and provide healthy conditions for each patient, but it may generate some embarrassing positions and conflicts by ethical nature. Bioethics as well as its moral values and principles can solve half of these problems, that’s why practicing this job—being a stomatologist—we must respect the principles of ethical code. Thanks to wisdom and high-level of professionalism many people can smile and they may be happy again and again.

Keywords: Bioethics, stomatology, implantology, ethical conflicts, agreement

21. THE NEUTRAL POSITION OF THE DENTIST DURING THE PROFESSIONAL ACTIVITY AND THE CONSEQUENCES OF BREAKING IT

Ciobanu Iulia

Academic adviser: Marina Iurie, assistant lecturer, Department of Dental propedeutics and dental implantology “Pavel Godoroja”, State Medical and Pharmaceutical University “Nicolae Testemițeanu”, Chișinău, Republic of Moldova

Introduction: A work-related musculoskeletal disorder is an injury affecting the musculoskeletal, peripheral nervous and neurovascular systems. It is caused by prolonged, repetitive, forced and awkward movements, poor posture, equipment that doesn’t suit the requirements, overloaded program, stress and insufficient resting time. Dentists are exposed to a huge risk of developing a musculoskeletal disorder because of repetitive movements combined with forced movements, poor posture during the work, big efforts, stressing and lack of rest. Probably the most important risk factor is the poor posture. Researchers have found the presence of poor postures in the neck, back, shoulders, hands and wrists. Poor postures may appear because of improper seating of the doctor, improper seating of the patient and poor work techniques. Injuries to the muscles, tendons and nerves can be prevented in many cases. Neutral posture is the perfect posture of the body during work, associated with the lower risk of musculoskeletal trauma. For most joints a neutral posture is the posture when the joints are being used almost at half of their full range of motions.

Purpose and Objectives: To establish the neutral postures during the work with the proper, comfortable and efficient seating of the dentist and the patient.

Materials and methods: During the study there were compared advantages and disadvantages of practicing patient’s and dentist’s postures. Students applied the theoretical knowledge during their practicing on phantoms.

Results: The efficiency of neutral postures was studied on the base of practical activity of the students on phantoms within 2 hours and completing surveys afterwards. The evaluation of the

treatment techniques depend on precise knowledge of the facial muscles and esthetics, the healing and scarring injury principles, the assessment of the psychological damage as well as an accurate physical examination. The facial scar correction is an unique procedure in the facial-reconstructive surgery due to its unpredictable post-trauma development. For a functional and esthetic effect, at the head-neck region, the following dermatoplasty methods were applied: intact skin grafts plasty, medium-sized dermal splitted transplants, adjacent or distant pedicled flaps plasty. The surgical repair of the dermal defects of the face and neck require a special tactique. In certain cases, the skin transplant and the distant pedicled flaps can be replaced by special treatment methods which use adjacent intact tissue, such as: pedicled flap transposition plasty, expanded tissular flaps plasty of the soft tissues. Following the base surgical principles in the pediatric field is of a high importance. In this way, choosing the adequate surgical method for a specific segment, given its functional and esthetic place, the avoidance of tension stiches are some among other important steps that determine the succesful completion of a high quality treatment.

Conclusion: At pediatric ages, the chosen reconstructive surgical method of tissular defects does not depend on the patient's age, but rather on the localization and nature of the defect, as well as the requirements regarding the functional effects of the respective segement. In most of the cases, in the functional-active regions, methods such as full thickness skin grafts plasty using adjacent intact tissue are applied.

Keywords: postcombustional scar, pediatric surgery, dermalplasty, flap, graft

20. ACTUAL ETHICAL TOPICS OF DENTAL IMPLANTOLOGY

Busmachi Irina

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Introduction: Despite of chosen professional branch, medicine imposes certain ethical principles in medical activity providing moral values of doctor's daily activity behavior and attitude. In such a way, the professional ethics sets up a system of standards and rules of conduct, which reflect some social functions of medicine: doctor-patient, doctor-doctor and doctor-society relations etc. Stomatology-is a vast profession with high ethical standards, thus stomatologists must be able to face many difficult situations, being based on moral thinking and high ethical norms. During the working process in dentistry, between doctor-patient and other relations many "banal" conflicts have already appeared. These misunderstandings could be solved keeping up respecting certain established bioethical principles.

Purpose and Objectives: to elucidate some values and principles of medical Bioethics, their impact on Dentistry and Implantology, making evident the scientific achievements in these fields of Stomatology and finally to solve bioethical problems.

Materials and methods: published monographs, articles and statistical data. There were used sociological, historical-medical and bioethical methods.

Results: Medicine-is a socio-human domain, in which a doctor has a big significance doing his job day by day: as a practitioner, as a psychologist, as a teacher and many others. In different medical fields doctor works with the people and for the people, he or she is called „The right hand of the God”. In Dental Implantology the doctor has the same functions and this medical field has its special rules and risks. Many difficulties may appear caused by both sides: by the doctor or patient. On doctor's side they may be: many risks in anaesthesiology caused by the lack of knowledge in this domain, the incompatibility of the patient and anaesthesiological substances, the risk to be infected with venereal diseases caused by inadequate and insufficient sterilization and also the superficial knowledge in this area, the guarantee of the final result for personal boost and reclamation (advertising), technological difficulties which are caused by the incompatibility between tissue and implant (tissue incompatibility). As we know there are 2 types of implants: the first method „In one step” when the tooth is implanted completely without osteointegration; in such

11. SENSORINEURAL HEARING LOSS SYNDROME: INCIDENCE AND METHODS OF TREATMENT

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Introduction: Currently, over 200 million people across the globe suffer from impaired hearing, a large part of which is caused by ear damage, located in the auditory nerve or cochlea, which is defined by sensorineural hearing loss. The difficulty of identifying the mechanism of occurrence of this disease makes it impossible to establish so far, an effective therapy, that would ensure certainly a satisfactory auricular recovery after administration. Thus, the therapeutic management of sensorineural hearing loss syndrome remains a very controversial topic, despite advances in technology, because of a multifactorial pathogenesis and the low recovery rate of hearing. In Moldova this problem exists and has difficulties in some aspects of this pathology such as genetic diagnosis and early correction of genetic forms of deafness.

Purpose and objectives: Statistical evaluation of a group of patients diagnosed with sensorineural hearing loss, and literature analysis on groups of medications used in the treatment of sensorineural hearing loss.

Materials and methods: Clinical-statistic study according to different criteria of classification.

Results: Our results show an almost equal distribution of cases of congenital sensorineural hearing loss between the sexes, with a slight predominance of males to the females (51.56% male to 48.44% female). Study the distribution of cases by area of origin showed a higher proportion of patients in urban areas (59.36% urban versus 40.63% rural). Studying the age group of the 28 cases we have found that the dominant age group between 11 and 20 to 34.44%. We found that the highest percentage of patients is represented by those with profound sensorineural hearing loss-11 patients representing 36.5% of all patients. Hearing loss treatment is a combination of remedies including vasodilators, nootropic and antioxidants. All these remedies used together contribute to improve hemodynamics in the region of the inner ear, increase metabolism and stimulate the auditory analyzer.

Conclusion: Congenital sensorineural hearing loss remains a very common disease that requires specific treatment behavior, especially combined.

Keywords: sensorineural hearing loss, treatment, statistic

12. COMBINED OTOLOGIC DRUGS ON PHARMACEUTICAL MARKET OF MOLDOVA

Luca Angela, Staver Olga

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Introduction: About one-tenth of medicinal products present on the pharmaceutical market are fixed-dose combinations. Fixed-dose combination products are becoming a popular treatment option because of increased patient's compliance and convenience, improved clinical effectiveness, reduced cost for the patient and reduced side effects. Due to this range of advantages, combined drugs can be used in otorhinolaryngology practice, especially in the pharmacotherapy of ear diseases, because of the severe consequences otitis media produces (such as deafness due to keloid scars of the tympanic membrane).

Materials and methods: For research, State Nomenclature of medicines from Republic of Moldova was used (26.03.2014); patient information leaflets; quality standards of analytical documents and therapeutic protocols in otorhinolaryngology (section "ear diseases").

Results: There are 642 combined drugs including: 531 combined drugs, 75 phytotherapeutic combined drugs and 36 biological combined drugs registered in State Nomenclature of drugs from

Republic of Moldova. From these, approved drugs in otorhinolaryngology are 87 combined drugs, 20 phytotherapeutic combined drugs and 1 biological combined drug, which represents 13,55%, 3,11% and 0,15% from the total number of registered fixed-dose combination products, respectively, 16,38%, 26,67% and 2,77% from the number of registered specific combined products.

There are 5 registered otological drugs which represents 0,78% from the total number of registered fixed-dose combination products and ,respectively, 0,94% from the number of registered specific combined products. From these: 40% represents anti-infectives, 20% represents analgesics and anesthetics and 40% represents corticosteroids and anti-infectives in combination. So, there is no specific anti-adhesive drug combination for the treatment of eardrum keloids.

Conclusions: In conclusion it is important to develop a new anti-adhesive composition for the treatment of keloids of the tympanic membrane, containing raw vegetable materials.

Keywords: fixed-dose combinations, combined drugs, anti-adhesive substances, keloids

13. ANTINEOPLASTIC AGENTS, AVAILABLE ON PHARMACEUTICAL MARKET OF THE REPUBLIC OF MOLDOVA

Macaeva Anastasia

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Introduction: Chemotherapy is a type of cancer treatment that uses drugs to destroy cancer cells. One group of such drugs is antineoplastic agents, which consists of 5 subgroups: alkylating agents, antimetabolites, plant alkaloids and other natural products, cytotoxic antibiotics and related substances, other antineoplastic agents.

Purpose and Objectives: Evaluation of the arsenal of chemotherapeutical drugs used for treatment of different types of the cancer in Republic of Moldova.

Materials and methods: Analysis of the State List of RM drugs and recommendations of the WHO; statistical data processing.

Results: According to the international classification ATC, the Collaborating Centre for Statistical Methodology WHO recorded on 28/03/2014, in the L01 (antineoplastic agents) group, there are 158 single INN and 2 drug combinations. Currently on pharmaceutical market of RM there are 229 names of antineoplastic agents, including 55 INN, which makes 34, 37% of those recorded by WHO. Alkylating agents (L01A), which can be found on pharmaceutical market of RM makes up 5,6% of all the remedies recommended by WHO, antimetabolites (L01B)– 5,6%, plant alkaloids and other natural products (L01C) - 3,75%, cytotoxic antibiotics and related substances (L01D) – 3,57%, other antineoplastic agents (L01X) – 15,62%. At the moment, there are 19 products, which are produced in RM, of which 11 INN; the rest are being imported. There are also 93 drugs from L01 group, which are authorized by European Medicines Agency, from which only 21 are as well authorized in RM. In 18th WHO Model List of Essential Medicines (April 2013) in section “Cytotoxic and adjuvant medicines” in Complementary List there are mentioned 25 drugs, but in Ministry of Health Order no. 144 of 28.02.2011” there are also added 21 drugs.

Conclusions: It was estimated that there will be 1,660,290 new cases of all cancer sites and an estimated 580,350 people will die of this disease, in 2013. Thus, the elaboration of new anticancer drugs, which will have smaller cytotoxicity parameters, better activity and bioavailability is one of the main goals for the contemporary medicine and pharmacy. The other goal for the RM is to provide the population with the wide range of contemporary chemotherapeutical agents.

Keywords: Antineoplastic agents, cancer, statistics

14. PLANT PRODUCTS GEMMAE - SOURCES OF ACTIVE PRINCIPLES

Macari Gheorghe

Scientific adviser: **Calalb Tatiana**, Doctor of Biology, Professor, Department of Pharmacognosy and Pharmaceutical Botany, State University of Medicine and Pharmacy "Nicolae Testemițanu", Republic of Moldova

Introduction: Gemmotherapy is based on using the so-called "stem cells", which are embryonic plant tissues, namely young parts that hold the regenerating power of the plant. Plant products used as sources of active ingredients with valuable therapeutic qualities are buds, branches, internal bark or root bark of young branches, sap, seeds germinated and young seedlings. Bioactive complex of these plant products can quickly intervene in human metabolism, producing series of reactions at the molecular and cellular level of eliminating foreign substances that help detoxify the locked cells (based on the specific action of certain organs) and resume their functionality. Use of gemmoderivates shows a gentle therapy, with a deep action and without negative consequences. Classical gemmotherapy was initiated by Belgian doctor Pol Henry (in 1950), which has withstood time and in the last decades show a rising interest.

Purpose: Qualitative and quantitative analysis of flavonosids and tannins in buds *gemmae* of woody plants.

Materials and Methods: As a biological material for chemical study served buds of horse chestnut trees, walnut, white birch, white poplar and cherry. Flavonosids qualitative study was conducted by applying color or precipitation reactions and quantitative- spectrophotometer. Qualitative analysis was performed by tannins specific reaction on TLC, here quantified by titrimetric method.

Results: The result of the chemical study of flavonosids in plant products *gemmae* of *Aesculus hippocastanum*, *Juglans regia*, *albosinensis Betula*, *Populus alba*, *Prunus avium* established the presence of the following constituents flavonoids. In the result of qualitative reactions we determined the presence of flavones, flavonols, flavanonls, anthocyanins, aurons and chalcones in Pv *gemmae*. The spectrophotometric study of flavonoids shows that the maximum content belong white poplar buds- 7.208 %, then decreasing at Walnut - 6.808 %, cherry-3,508 % horse chestnut-2.912 %, white birch- 2.746 %, birch-2.220 %. The specific reactions for tannins identification demonstrate the presence of condensed tannins and hydrolyzable tannins in buds. The titrimetric dosage denotes the presence of a high content in analyzed buds, most being in the horse chestnut buds (20.541 %), followed by the walnut (15.406 %). The cherry buds contain (9.928 %), followed by white poplar buds (6.847 %) and white birch (6.505 %) and the lowest content of tannins have the buds of white birch (2, 326 %).

Conclusions: Thus, the analyzed buds besides the specific biocomplex conditioned by the presence of specific meristemetic tissue may also contain large quantities of tannins and flavonosides with valuable therapeutic qualities. The buds represents a complex biological entity, in which is realized a synergy of the components in the human body.

Keywords: gemmotherapy, meristems, flavonosids, tannins

15. NEW VEGETABLE DRUGS GEMMAE - SOURCES OF ACTIVE PRINCIPLES

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Introduction: Gemmotherapy is based on using the so-called "stem cells", which are embryonic tissues, namely young parts that hold the regenerating power of the plant. Buds, branches, internal bark of roots or bark of young branches, sap, germinated seeds and young seedlings represent a valuable source of active principles with important therapeutic qualities. Bioactive complex of these vegetable drugs quickly intervenes in human metabolism, producing series of reactions at the molecular and cellular levels, participating in evacuation of toxic substances. These processes help to detoxify the locked cells (based on the specific action of certain

organs), that permit to resume their functionality. Using of gemmoderivates shows a gentle therapy of a deep action and without negative consequences. Gemmotherapy was initiated a long time ago (XIV-XV century), but classical one founded by Belgian doctor Pol Henry in 1950 during the last decades shows a rising interest.

Purpose: Qualitative and quantitative analysis of flavonoids and tannins in buds of some woody plants.

Materials and Methods: As a biological material for chemical study served buds of horse chestnut tree, walnut, white birch, white poplar and cherry tree. Qualitative study of flavonoids was conducted by applying color or precipitation reactions and quantitative – spectrophotometry method. Qualitative analysis of tannins was performed by chemical specific reaction and thin layer chromatography and quantitative one by titrimetric method.

Results: The analyses of the qualitative study of flavonoids in the vegetable drugs *gemmae* of *Aesculus hippocastanum*, *Juglans regia*, *Betula pendula*, *Populus alba*, *Prunus avium* established the presence of the following flavonoids constituents: flavones, flavonols, flavanonols, anthocyanins, aurones and chalcones. The spectrophotometric study of flavonoids shows that the maximum content belong to white poplar buds – 7.208%, then decreasing in the buds of walnut – 6.808% , cherry tree – 3.508%, horse chestnut – 2.912% , white birch – 2.746%, and in the catkins of white birch – 2.220%. The specific reactions for tannins identification demonstrate the presence of condensed and hydrolyzed tannins in analyzed buds. The titrimetric dosage of tannins denotes the presence of a high content in analyzed buds, the most being in the horse chestnut buds (20.541%), followed by the walnut (15.406%). The cherry buds contain – 9.928%, followed by the white poplar (6.847%) and white birch buds (6.505%). The lowest content of tannins has the catkins of white birch – 2.326%.

Conclusions: The analyzed buds also contain large quantities of tannins and flavonoids with valuable therapeutic qualities besides the specific biocomplex conditioned by the presence of specific meristematic tissue. The buds represents a biological complex entity, in which is realized a synergy of their components in the human body.

Keywords: gemmotherapy, meristems, flavonoids, tannins

16. DEVELOPMENT AND VALIDATION OF THE UV SPECTROPHOTOMETRIC METHOD FOR ANALYSIS OF ETHANOL SOLUTION OF ISOCONAZOL NITRAT

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Introduction: The high prevalence and the constant increase of incidence of skin fungal infections and its annexes causes a continuing interest for the analysis and standardization of antifungal agents.

Purpose and objectives: Validation of UV spectrophotometric method for analysis of nitrate Isoconazole obtained through original from synthetically imidazole ionic liquids.

Materials and methods: Reference study (articles of journals, periodicals, European Pharmacopoeia). The object of the research was the sample of Isoconazole nitrate, synthesized in the Laboratory of Synthetic Organic Chemistry Institute, Academy of Sciences of Moldova. Instruments: UV Visible Spectrophotometer (Agilent 8453); electric balance (OHAUS).

Results: The Isoconazole nitrate solution spectrum shows the well-defined spectral absorption maximum between 274 nm and 282 nm. Ethanol shows absorption maxima at other wave lengths. So it can be used as a solvent. According to the calibration straight lines, a better linearity shows the data taken at λ 274 nm. In the concentration range 50-150 mg / mL, the relative standard deviation is 0.22% maximum, which is equivalent to a very good accuracy of the method.

Conclusion: According to the results of the study, the UV spectrophotometric method was validated. It allows the quantitative determination of the nitrate Isoconazole in ethanol solution. This method is rapid, requiring small amounts of reagents, providing accurate and reproducible data.

Keywords: Imidazole derivatives, isoconazole nitrate, UV spectroscopy

17. PARTICULARITIES OF VALIDATION HPLC METHOD DOSING

Muntean Marina, Vislouh Oxana

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Introduction: Chromatographic methods are commonly used for the quantitative and qualitative analysis of raw materials, drug substances, drug products and compounds in biological fluids. Validation of a method is the process by which a method is tested by the developer or user for reliability, accuracy and preciseness of its intended purpose.

Materials and methods: Advanced bibliographic study.

Results: Though many types of HPLC techniques are available; the most commonly submitted method, the reversed-phase HPLC with UV detection, is selected to illustrate the parameters for validation. A. Accuracy is the measure of how close the experimental value is to the true value. Accuracy studies for drug substance and drug product are recommended to be performed at 80-100 and 120% levels of label claim as stated in the Guideline for Submitting Samples and Analytical Data for Methods Validation. B. Limit of Detection and Limit of Quantitation specifications are submitted with the regulatory impurities method relating to release and stability of both drug substance and drug product. C. Linearity range of detectability that obeys Beer's Law is dependent on the compound analyzed and detector used. D. Precision is the measure, that expresses the closeness of data values between a series of measurements obtained under unchanged analytical conditions. E. Range is the interval between the upper and lower levels of analyte studied. F. Recovery is defined as the observed result obtained from an amount of the analyts compared to the expected result obtained from theoretical amount and expressed as a percentage. G. Robustness is defined by ICH as a measure of the method's capability to remain unaffected by small, but deliberate variations in method parameters. H. Sample Solution Stability of the drug substance or drug product after preparation according to the test method should be evaluated according to the test method. I. Specificity/selectivity: the analyte should have no interference from other extraneous components and be well resolved from them. J. System Suitability Specifications and Tests are parameters that provide assistance in achieving this purpose.

These parameters will be used to validate the method of assay of cinnamic acid from Tolu Balm in tablets.

Conclusions: The variations due to the drug product manufacturing process, the laboratory sample preparation procedure and the performance instrument contribute to the accuracy of the data obtained from the analysis. Only with good reliable validated methods, data, generated for release, stability, and pharmacokinetics, can be trust-worthy.

Keywords: HPLC, accuracy, detection limit, linearity, precision, range, recovery, robustness, stability, specificity

18. EVALUATION OF ACUTE TOXICITY OF POLYPHENOLS AND POLYSACCHARIDES EXTRACTS FROM *CENTAUREA CYANUS L.*

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Introduction: *Centaurea cyanus L.* is one of the species of *Asteraceae* family. It is an annual plant, growing as a weed in the fields. It is also used as ornamental plant due to its intense blue flowers. Cornflower has a long history of herbal use. The officinal vegetal product is *Cyani flores*. Externally it is used as anti-inflammatory and astringent for eye ailments and skin cleansing. The dried flowers have antipruritic, antitussive, weakly diuretic, emmenagogue, ophthalmic, very mildy

purgative, and tonic properties. According to our investigations aerial parts of *C. Cyanus* L. are an incontestable source of many phenolic compounds and polysaccharides. Pharmacological studies pointed out strong anti-inflammatory, gastroprotective effect of the *Cyani herba* selective extracts.

Purpose and objectives of this study was to test the acute toxicity of polyphenols and polysaccharides extracts from *Cyani herbain* on mice.

Material and methods: The polyphenols extract from *Cyani herbawas* obtained by direct extraction with 60% aqueous ethanol and the polysaccharides one – with distilled water at 90°C. The total polyphenols and polysaccharides contents were determined in both extracts. Acute toxicity was evaluated in 84 mice (42 male and 42 female), weighing 18-26 g. Each extract was dissolved in constant volume of NaCl 0.9% (0.4-1 ml by oral route using intragastric syringe, and 0.2-0.5 ml – intraperitoneally). Initially animals were given 50, 250 mg/kg body weight (b.w.) of the extracts respectively, to possibly establish the range of doses producing any toxic effect. The animals were observed continuously for 7 days for any gross change in behavioural, neurological, autonomic profiles and mortality in each group. Subsequently 500, 2000, 4000 mg/kg b.w. of the extracts were administrated. Mice were sampled after mortality for histopathological analyses of the selected tissues. The statistical analyses were carried out using Kurber's and Prozorovschi's methods.

Results: The acute lethal study of *Cyani herba* extracts in mice shows that enteral LD₀ was 4000 mg/kg b.w. LD 25%, LD 50%, and LD 100% haven't been established. Using intraperitoneal route LD₀ for both extracts was 250 mg/kg b.w. Intraperitoneal LD 17% for polyphenols extract was determined at 500, 2000, and 4000 mg/kg b.w. Intraperitoneal LD 34% for polysaccharides extract was established at 2000 and 4000 mg/kg b.w.

Conclusion: The obtained LD₀ value classifies the studied plant extracts as slightly toxic. The results suggest that the polyphenols and polysaccharides extracts of the aerial parts of *Centaurea cyanus* L. is relatively safe toxicologically when administrated orally and intraperitoneally.

Keywords: acute toxicity, *Cyani herba*, extracts, mice

19. METHODS OF DOSING FLAVONOIDS IN MEDICAL PLANTS

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Introduction: Flavonoids represent a group of useful compounds of vegetal origin that are of great interest for physiotherapy and pharmacology. This is a class of phenolic substances which gives its color to many species of flowers and fruits. Frequently, these pigments can be found in such plants as glycosides, in which one or more of the hydroxy groups of phenols are combined with reducing glucose. Based on the analysis, the effects of flavonoids can be grouped around the following biochemical processes: antioxidant and anti-inflammatory effect, and an important influence for the function of the immune system against asthma and allergies; in general could change the inhibition functioning of enzymes, viruses and bacteria effect. These benefits argue the objective of the study: dosing flavonoids in different part of the plant through spectrophotometric and chromatographic techniques.

Purpose and objectives: To assess the methods of dosing flavonoids from various vegetable products: underground part, aerial parts, flowers, leaves and seeds.

Materials and methods: Vegetable products containing flavonosids: *Silybi fructus*, *Calendulae flores*, *Menthae piperitae herba*; *Agrimoniae herba*, *Simphyti radices*. Reference Standards - quercetin, rutoside, luteolin, silibinin, hyperoside. The analyzes were performed at perchin Elmer spectrophotometer Lambda 25 UV-VIS and high pressure liquid chromatography Jasco reversed phase.

Results: Flavonosids extraction was performed with ethyl alcohol 70%. For spectrophotometric determinations, were obtained extracts from the different part of the plant and analyzed in relation to alcoholic solutions of reference standards: quercetin, rutoside, luteolin, silibinin, hyperoside. The results were recalculated after standard dosage of quercetin at wavelength 375 nm. Following results were

obtained for the total content of flavonoids: Simphyti radices-0,08%; Agrimoniae herba-1,39%. Calendulae flores-0,26% Silybi fructus-0,09%; Menthae piperitae herba-0,95%. For chromatographic separation was developed a unique technique for all extracts, based on the use of the solvent system acetonitrile:purified water (80:20). The final results of dosing flavonoids by HPLC method are correlated with those obtained from UV-VIS spectrophotometric determination.

Conclusion: The obtained optimized extracts present the total concentrations of flavonoids, as evidenced by HPLC analysis and UV-VIS.

Keywords: vegetable products; flavonoid; extracts

20. THE STUDY OF COMPATIBILITY OF ECONAZOLE NITRATE AND BETAMETHASONE DIPROPIONATE

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Introduction: Econazole nitrate is an antifungal substance of the imidazole class that is successfully used in the treatment of different types of mycosis, especially those caused by agents as *Aspergillus fumigatus* and *Candida albicans*. According to WHO every fifth person is affected by a fungal disease. Mycoses are often associated with secondary infection followed by inflammation, that is why one of the possible drug combinations in the treatment of this disease is the combination between econazole nitrate and betamethasone dipropionate.

Purpose and objectives: Studying the compatibility of econazole nitrate and betamethasone dipropionate using different modern methods and analysis of the results from different perspectives.

Materials and methods: The research is based on the identification of econazole nitrate and betamethasone using the Infrared Spectrophotometry and the determination of the content of each substance in the mixture using UV-VIS Spectrophotometry and the HPLC chromatography.

Results: Infrared spectrums of econazole nitrate, betamethasone dipropionate and the mixture of econazole nitrate and betamethasone dipropionate (prepared from 1,0 g of each substance) show that there are few interactions between them. Infrared Spectrophotometry, as a modern method of analyse, is used only for identification of the substances, so it doesn't reveal any quantitative aspects. According to this, for testing forward the compatibility of the analyzed substances there were recorded UV-VIS spectrums using different solvents such as C₂H₅OH 96%, CH₃OH, HCl 0.1M (according to European Pharmacopoeia). The recorded UV-VIS spectrums show that the substances by themselves correspond by quantitative aspects, but the mixture of them doesn't correspond. The compatibility of econazole nitrate and betamethasone dipropionate was also tested using HPLC chromatography. Chromatograms of econazole nitrate, betamethasone dipropionate taken on their own mobile phase show quantitative correspondence, but chromatograms of the mixture taken on the mobile phase of each substance doesn't reveal any compatibility.

Conclusion: The study of compatibility of econazole nitrate and betamethasone dipropionate, based on using different modern methods, revealed that the substances are incompatible.

Keywords: econazole, betamethasone, compatibility, spectrums, chromatograms

21. MARKETING ACTIVITY IN COMMUNITY PHARMACY

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Introduction: Pharmacy Marketing is a modern pharmaceutical management that is based on the orientation of the patient as "customer orientation" marketing concept is considered the foundation of modern marketing management. The value of service oriented marketing activities

consist of information, ideas, advice and is intended to increase the value of the pharmaceutical product, so chemists promote professional pharmacy service and not just release drugs. Competition for patients is fierce and pharmacy service make the difference between a pharmacy and another because drugs in pharmacies are essentially the same, but the services do not. Pharmaceutical marketing strategic planning provides support for the assessment of the types of goods and pharmacy service offers by community pharmacy.

Purpose and objectives: The efficiency of developing a strategic plan for marketing pharmacy patient- centered and development pharmacy service-oriented, and implementing this in pharmacy practice.

Materials and methodes: Foundation of the marketing plan for a patient care, SWOT analyse, elaboration a service project.

Results: Close collaborative relationship between pharmacist and patient is the key to creating and sustaining demand for pharmacy product and service on a long-term basis in community pharmacies. Ability to expand a strategic marketing plan is an important component for pharmacists who want to promote their services. Considered ethical marketing practices can enhance the image of a pharmaceutical enterprise, strengthen consumer confidence, increase satisfaction and determine consumers to benefit further from the services provided by community pharmacy. By means of pharmaceutical services projects determine the skills and responsibilities of pharmacists as health professionals. Refocusing of pharmacy practice gives premises for implimentation of the concept of relationship pharmacy marketing, it refers to attracting, maintaining and enhancing patient relationships to create mutual benefit for the pharmacist and patient. Relationship marketing fits well with promotion pharmacy service, focuses on the pharmacist-patient, rather than releasing drugs, because patients cannot physically see or touch services, they must understand and experience them to derive benefits and appreciate their value.

Conclusion: Were proposed steps for pharmaceutical marketing strategic planning, which would help pharmacists to influence decision making process in pharmaceutical activity and determined the utility service projects in the delivery of pharmacy service.

Keywords: marketing activity, pharmacy service, productive relationships, customers, benefits

22. LYCOPENE – SOURCES AND BENEFITS

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Introduction: Lycopene is a bright red carotenoid pigment. Chemically, lycopene is a carotene, but it has no vitamin A activity. It's also known as rhodopurpurin (common name) and the scientific name is non-provitamin A carotenoid.

Materials and methods: Advanced bibliographic study.

Results: Carotenoids such as lycopene are important pigments found in pigment-protein complexes from plants, photosynthetic bacteria, fungi and algae. It is responsible for bright colors of the fruits and vegetables, has different functions in photosynthesis and protects photosynthetic organisms from damage due to excessive light. The fruits and vegetables with a high concentration of lycopene are: *sun dried tomatoes* (45902μg per 100 grams), *tomato purée* (21754μg per 100 grams); *guava* (5204μg per 100 grams); *watermelon* (4532μg per 100 grams) ; *tomatoes (cooked)* (3041μg per 100 grams) ; *papaya* (1828μg per 100 grams); *grapefruit* (1135μg per 100 grams); *sweet red peppers (cooked)* (484μg per 100 grams) ; *dried herbs & spices (basil)* (393μg per 100 grams) ; *liver (chicken, cooked)* (25μg per 100 grams). Although gac (*Momordica cochinchinensis* Spreng) has the highest content of lycopene of any known fruit or vegetable, up to 70 times more than tomatoes for example, due to gac's rarity outside its native region of southeast Asia, tomatoes and tomato-based sauces, juices, and ketchup account for more than 85% of the dietary intake of

lycopene for most people. Nowadays, the lycopene is included in a number of food supplements, such as: *Licopen* (Medicer Bio – lycopene 25 mg, flax flour 200 mg); *Lycopene* – 10 mg (Puritan's Pride); *Lycopene* -10 mg (Biovea).

Due to its antioxidant properties, lycopene is thought to play a role in preventing cancer and heart disease, lowers LDL levels, enhances the immunity, protects the enzymes. One of the most important benefits of the lycopene is the prevention and treatment of cancer – lung cancer, stomach cancer, bladder cancer, skin cancer and particularly prostate cancer.

Conclusions: The beneficial effects of lycopene determine us to initiate research to assess the lycopene content in different plant sources available on the market as well as some food and dietary supplements.

Keywords: lycopene, antioxidant, cancer

23. NMR SPECTRA INTERPRETATION

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Introduction: From all the methods, nuclear magnetic resonance (NMR) is one that offers the richest and the most complete structural information about organic compounds. This method can be applied to the elucidation of chemical structure as well as the determination of stereochemistry and conformation of their pure substance and mixture. The interpretation of the NMR spectrum becomes an increasingly empowered ability applied in the context of the rapid development of organic synthesis of new compounds, and in the increasing interest for the existing drug substances.

Purpose and Objectives: The highlighting of the main stages of NMR interpretation spectrum, the structure elucidation of organic compounds and determination of their stereochemistry and conformation.

Materials and methods: The study is performed by meta-analysis of published scientific data, standardization of analytical quality documents, articles from magazines and periodicals.

Results: As a result of the study was formulated an algorithm of the interpretation of NMR spectrum. We applied the rules established in the analysis of NMR spectrum, which gave us information about the structure of substances and their conformation. The data that were obtained correlate with the data from the scientific literature and confirm the applicability of the formulated algorithm.

Conclusion: The right interpretation of the NMR spectrum, allows the accurate identification of the structure of an unknown substance, with any molecular weight and any number of molecules, as well as isomers differentiation between them.

Keywords: NMR spectrum interpretation, functional group

24. STUDY OF PHYSICO-CHEMICAL PROPERTIES OF A THIODIAZOL DERIVATES WITH ANTI-MYCOBACTERIAL ACTIVITIES

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Introduction: Tuberculosis remains one of the most devastating infectious diseases affecting people in different social and age groups. The situation becomes even more complicated with the increasing number of drug-resistant tuberculosis cases, where conventional therapy is no longer effective, and better antimycobacterial drugs either do not exist or are too expensive.

The purpose of the study: Study of physicochemical properties of an anti-mycobacterial compound from the group of thiodiazol derivatives.

Materials and methods: Melting point determining device Kruss KSP1N & KSP1D, drying cabinet, UV-VIS spectrophotometer, solvents and reagents in accordance with the European Pharmacopoeia.

Results: In collaboration with the laboratory of the Institute of Organic Synthesis Chemistry of RM, were synthesized 80 compounds substituted derivatives of 5-aryl-1,3,4-oxadiazoles and thiourea, that were tested for anti-mycobacterial activity against *M. tuberculosis* in the Southern Research Institute, Birmingham, USA. In the series studied, a major activity (MIC 98%) was recorded for the monosubstituted compound of thiourea with allyl fragment. This compound is shown to be a white powder, with yellow tinge or colorless crystals, specific odor and a bitter taste. There have been made physical and physico-chemical analysis to determine the properties of the compound studied: melting point (119.6°C); solubility - the substance is practically insoluble in water and ethanol, slightly soluble in methanol, soluble in chloroform, acetone, DMSO, DMFA, and acetonitrile. It was determined the water content and the loss on drying (Karl Fischer titration reagent and drying oven), which showed water content of the minor (0.0009% and 0.001%, respectively), which also indicates that the substance is not hygroscopic.

Conclusions: Determined physicochemical properties of the studied compound will provide the support in the development of analytical methods and standardisation for this product.

Keywords: tuberculosis, anti-mycobacterial, tiodiasol, melting point

25. THE EFFECT OF NANOSILVER ON THE WOUND PROCESS

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Introduction: Analysis of the literature showed a constant increase in the number of methods to influence the course of wound healing, indicating their lack of effectiveness. Development of applications of nanotechnology in medicine opens wide prospects for their use in the treatment of wounds. The use of nanoparticles of metals, especially nanosilver, is of particular interest in this field.

Purpose: To investigate the effect of particles of nanosilver on the kinetics of cell populations on the skin wound model.

Materials and methods: 30 Wistar rats weighing 180-230g, were used during the experiment. All the animals were divided into 2 groups. In the first, the control group, the rats wool area was shaved under ether anesthesia, a 2 cm long wound deep to the subcutaneous fascia was applied using a scalpel, the defect was sutured. In the second group, silver (Ag) 30nm was applied on the wounds respectively. Nanoparticles Ag 30nm were produced by the Scientific Research Institute of Physics ONU Mechnikov. The obtained histologic sections were stained with hematoxylin-eosin and Van Gieson.

Results: As a result of the experiment in the second group, the decrease of leukocyte and macrophage infiltration was identified in the early stages of healing compared with the control which indicates the anti-inflammatory effect of nanoparticles of silver on the wound. Increase in the number of myofibroblasts indicates better constriction of the injury. The number of fibroblasts and new vessels on day 5 indicates the prevalence of the proliferative activity. The results of study on day 7 and later indicate more rapid wound healing.

Conclusions: The treatment of wounds using nanomaterials promotes the formation of tissue of histoarchitectonics closest to the intact skin.

Keywords: nanomaterials, wound, healing

26. REASONABLENESS OF DEVELOPING A NEW ANTIFUNGAL PRODUCT IN THE FORM OF EAR DROPS ANTINEOPLASTIC AGENTS, AVAILABLE ON PHARMACEUTICAL MARKET OF THE REPUBLIC OF MOLDOVA

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Introduction: There has been an increase in the prevalence of otomycosis in recent years. The most recommended and dominate treatment of otomycosis, is topical instillation of ear drops. Ear drops provide the advantages of combination therapy, extending the range of therapeutic options. Considering poly-etiology of this disease (the possible presence of fungal bacterial flora), treatment should include antimicrobial, antifungal, antiinflammatory, and if necessary, an analgesic effect that is achieved by the use of combined ear drops.

Purpose and objectives: analyze the available pharmaceutical products used for treatment of otomycosis. The rational application of these medications makes it possible to eliminate rapidly a variety of etiological factors, reduce the severity of inflammation, and to improve the quality of patient's life.

Materials and methods: For research it was used State Nomenclature of drugs of Republic of Moldova (01.03.2014); Nomenclature of drugs of Romania (01.03.2014); State Register of drugs of Russia (01.03.2014); Formulation of European Medical Agency (01.03.2014); Formulation of USA (FDA Drugs) (20.02.2014); Great Britain Formulation (01.02.2014); instructions for use of drugs; Standards of quality of analytical documents and therapeutic protocols in otorhinolaryngology (section "ear diseases").

Results: Combined eardrops were analyzed in terms of their presence in the pharmaceutical market of RM in comparing with Russia, EU countries, USA and Canada. Nomenclatures of drugs from 7 countries (Moldova, Romania, Russia, Britain, France, USA and Canada) were examined. The results indicate that most frequently used 43 names of combined ear drops produced by 38 companies from 15 countries. Of these 38 companies only 2 produce combined ear drops which contains antifungal component. The pharmaceutical market in RM has 13 names of ear drops. The most products (58.3%) are combinations of antimicrobial v, corticosteroids, anti inflammatory, anesthetic and antiseptic medicines. Unfortunately, there are not registered combined ear drops that contain antifungal component.

Conclusions: In conclusion it is important to develop a new composition of ear drops, containing antibacterial and antifungal components.

Keywords: otomycosis, combined ear drops, antifungal medicines.

27. CONTEMPORARY PRINCIPLES OF PHARMACOTHERAPY URTICARIA

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Introduction: Chronic urticaria represents 25% of cases of urticaria, and is twice as common in women, especially in people between the ages of 25 and 50 years. Resulting from incidence of this disease in Republic of Moldova, it is required to effectuate a clinical study with the elucidation of the etiology, symptomatology and pharmacotherapy of patients with urticaria.

Materials and methods: The trial was conducted at Republican Clinical Hospital I.M.P.S, Department of Allergology. Working methodology consisted in the creation and registration of 97 cases of urticaria and angioedema hospitalizations in 2013 year in Allergology Department.

Results and discussions: In the Department of Allergology, 97 patients were admitted with the diagnosis of urticaria and angioedema, including 53 women and 44 men. Regarding the employment status, 68 patients were employed in different sectors, three students of 12th class, 6 don't work, and 10 were retired by age and had the degree of disability. It is found that in 37.1% of cases, patients are

diagnosed with chronic urticaria with mixed forms of angioedema; in 36.08% of cases patients are diagnosed with chronic relapsing urticaria; in 11.3% of cases, patients are diagnosed with angioedema, and in 5.15% of cases are hospitalized with acute urticaria. The etiology, recognized or presumed, is: the drug (62%), food (22%), and infections (16%). Proceeding from studies I found that the frequency of clinical symptoms (complaints) presented by patients may be distributed as follows: 54% of cases presented maculopapular rash all over the body, sometimes confluent, accompanied by intense itching; 26% of cases accuse marked asthenia, maculopapular, erythematous rash, mainly on the chest, abdomen, upper limbs and in 11% of cases - weakness, 37.50 °C fever. The most common concomitant diseases in patients with urticaria and angioedema are: chronic cholecystitis in flare (45%), chronic pancreatitis (25%), vegetative disorders (27%), chronic gastritis in flare (*H. pylori*) (15%), anxious-depressive neurosis (15%), hepatic steatosis (13%), chronic hepatitis (12%). From the analysis based on the patients treatment records of Allergology Department we can conclude that glucocorticoids are first-line drugs in antiallergic treatment of acute urticaria and angioedema (76%). Prescribing rate of Dexamethasone solution 8 and 4 mg constituting 84% and Betamethasone Solution (Diprophos) 1.0 ml constituting 16%. In this study, I found that antihistamines of 1st generation as chloropyramine is prescribed in 88% of cases, less frequently is prescribed Levocetirizine in tablets (Xilaz) - third-generation antihistamine (22%) and in 8% of cases Cetirizine tablets - second generation antihistamine and tablets Bilastine.

Conclusion: The therapeutic results are often modest. About 40% of cases that have evolved over six months are present during 10 years and 20% are found even after 20 years from the onset

Keywords: Urticaria, angioneurotic edema, glucocorticoids

28. BIOLOGICAL METHODS OF ANALYSIS IN QUALITY CONTROL OF MEDICINES

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Introduction: In addition to chemical and physicochemical methods in pharmaceutical analysis the biological methods is used as well. Biological evaluation of drugs happens usually by evaluation of both intensity biological effect (pharmacological) and of its toxicity. Biological methods are used, when the conclusion about the purity or toxicity of the pharmaceutical product can't be made by using physical, chemical or physicochemical methods, or when the method of obtaining of the drug can't guaranty the stability of its activity (ex: antibiotics). Biological analysis is the method of identifying drug substances and assay, based on the use of living organisms as analytical indicators. These organisms will populate environments chemically strictly determined. Biological methods of analysis permit determination of specific properties of the medicines. Biological methods consist in the comparing the specific characteristics of the standard and analyte in the determination of the analytical signal and the amount of studied parameter. Animals, such as cats, dogs, birds, toads etc. are used in biological assays. Isolated organs (ex: skin), separated from the cell culture (the constituent elements of the blood), as well as cultures of microorganisms are also used in the quantitative analysis. Substance activity is expressed in units of action.

Materials and Methods: Analysis of pharmacopoeia's monographs of British, European, Romanian, Belorussian and Russian Pharmacopoeias.

Results: Biological methods exposed in pharmacopoeias are similar to the methodology and recommendations for the analysis of different substances. Quantitative determination obtained by biological method of insulin, antibiotics, heparin and cardiac glycosides is stipulated in all pharmacopoeias. European and Belarus Pharmacopoeias are more focused on the assay of the vaccines and coagulation factors. British Pharmacopoeia proposes quantitative determination of monoclonal antibodies.

Conclusion: Biological methods of analysis are recommended for antibiotics, insulin, cardiac glycosides, heparin, blood clotting factors, serums and vaccines. These methods are best suited to obtain adequate information about specific qualities of substances.

Keywords: Monograph, biological methods, assay, animals, microorganisms

29. THE IR SPECTROPHOTOMETRY APPLICATIONS IN THE STUDY OF PHYSICAL AND CHEMICAL COMPATIBILITY OF SOME ACTIVE SUBSTANCES

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Introduction: The qualitative aspects of infrared spectroscopy are one of the most powerful attributes of this diverse analytical technique. IR spectrophotometric method is a modern method, which is used to identify the molecular structure of the drug substances based on the spectrum, resulting from the interaction of light with certain functional groups, bonds and structural units. IR spectrophotometric method was used in this study to determine the physical and chemical compatibility of izohydrofural, methyluracil and benzocaine by interpretation of the spectrum of pure and mixed substances.

Purpose and objective: To apply the IR spectrophotometric method in the research of physical and chemical compatibility of izohydrofural, methyluracil and benzocaine. This study will prove the possibility of a combination of izohydrofural, methyluracil and benzocaine in the same dosage form.

Materials and methods: In this research it was used the active substances: izohydrofural, methyluracil and benzocaine, and FT-IR Bruker Equinox 55 spectrometer.

Results: The infrared spectrum of a molecule is considered to be a unique physical property and it is a characteristic of the molecule. It is based on the fact that the structural features of the molecule, whether they are the backbone of the molecule or the functional groups attached to the molecule, produce characteristic and reproducible absorptions in the spectrum. This information can indicate whether there is backbone to the structure and, if so, whether the backbone consists of linear or branched chains. Next it is possible to determine if there is unsaturation and/or aromatic rings in the structure. Finally, it is possible to deduce whether specific functional groups are present. If detected, one is also able to determine local orientation in the group and its location in the structure. IR spectrophotometry is rich in information and it can be used in the chemical and physical compatibility studies of the drugs. An infrared absorption spectrum often contains a bewildering array of sharp peaks and minima. Peaks useful for the identification of functional groups are located in the shorter-wavelength region of the infrared, from about 2.5 to 8.5 mm, where the positions of the maxima are only slightly affected by the carbon skeleton of the molecule. Identifying functional groups in a molecule is seldom sufficient to positively identify the compound. For the study of physical and chemical compatibility of the drugs, there were interpreted the spectrum of each drug substances. Then it was analyzed the spectrum of the mixture of the chemical substances. After that, it was overlapped the infrared spectrum of each chemical substance with the infrared spectrum of the mixture. If the substances are physically and chemically compatible, then it must be present the same characteristic absorption bands of chemical functional groups both in the spectrum of each substance and in the spectrum of the mixture. The infrared spectrum of the mixture of izohydrofural, methyluracil and benzocaine has the most characteristic absorption bands of each substance, which indicates the physical and chemical compatibility of the molecules of the substances.

Conclusions: It was used the IR spectrophotometry to research the physical and chemical compatibility of some active, chemical substances.

Keywords: Physical and chemical compatibility, infrared spectroscopy

30. ISOFLAVONES-STRUCTURE, PROPERTIES, APPLICATIONS

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Introduction: Isoflavones are a class of organic compounds and biomolecules related to the flavonoids. Isoflavones are produced almost exclusively by the members of the *Fabaceae* (i.e., *Leguminosae*, or bean) family. Some are termed antioxidants because of their ability to trap singlet

oxygen. Some isoflavones, in particular soy isoflavones, when studied in populations eating the soy protein, have indicated that there is a lower incidence of breast cancer and other common cancers because of its role in influencing sex hormone metabolism and biological activity through intracellular enzymes, protein synthesis, growth factor actions, malignant cell proliferations, differentiation and angiogenesis. However some critics claim that isoflavones can increase the incidence of epithelial hyperplasia and cause goitre and hyperthyroidism. Isoflavones remain the subject of many scientific studies, as illustrated by the more than 1700 scientific publications mentioning isoflavones in their title or abstract. Most of these studies show that isoflavones may have some health benefit.

Materials and methods: bibliographic study of plants producing isoflavones - soybean (*Glycine max* L.), green bean (*Phaseolus vulgaris* L.), alfalfa sprout (*Medicago sativa* L.), mung bean sprout (*Vigna radiata* L.), cowpea (*Vigna unguiculata* L.), kudzu root (*Pueraria lobata* L.). The analysis of methods used for the separation and standartization of isoflavones: Nuclear Magnetic Resonance (NMR), UV-VIS, MS, high-performance liquid chromatography (HPLC).

Results: Most protocols of the sample preparation for isoflavone determination in soymilk and other liquid soybean products involves tedious freeze-drying and time-consuming extraction procedures. Were report a facile and rapid magnetic solid-phase extraction (MSPE) of isoflavones from soymilk for subsequent high-performance liquid chromatography electrospray ionization tandem mass spectrometry (HPLC-ESI-MS/MS) analysis. The extraction was based on the selective binding of the isoflavones to baicalin-functionalized core-shell magnetic nanoparticles (BMNPs). The HPLC method is the most suitable choice for the identification of flavonoids as separation methods are well established and coupling with the MS is easy. For the isolation of flavonoids from liquid samples (drinks) or of physiological fluids typically are addressed in two ways: the first one is based on liquid-liquid extraction, and the second SPE. An interlaboratory study was conducted to evaluate a method for determining total soy isoflavones in dietary supplements, dietary supplement ingredients, and soy foods. Isoflavones were extracted using aqueous acetonitrile containing a small amount of dimethylsulfoxide (DMSO) and all 12 of the naturally occurring isoflavones in soy were determined by HPLC with UV detection using apigenin as an internal standard.

Conclusions: Isoflavones are found in high concentrations in the vegetable, fruit and vegetable flavonols in most of the human diet.

Keywords: isoflavones, soybean, antioxidants

ETICS SECTION

1. BIOETHICAL IMPLICATIONS OF THE ROLE OF THE PHARMACIST SERVING PATIENTS OPTING FOR SELF-TREATMENT

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Introduction: Evolution of a wider process of serving patients by recommending a treatment with certain drugs without prescription is based on temporary replacement of the proper physician. This mode of dispensing should have the same professional attention from the pharmacist as in cases with prescription, but requires sufficient competence in the diagnosis and treatment of diseases.

Purposes and Objectives: Highlighting the bioethical implications of dispensing without a prescription and the contribution of the pharmacist to the welfare of the patient.

Materials and methods: International publications, published scientific research studies. Bioethics and sociological analysis were used. The key objectives are to highlight the pharmatherapeutic role of the pharmacist and the role as a replacement for the physician serving the patients who opt for self-treatment.

Results: Bioethics in pharmacy contributes to the distinction between occupation and profession, to countervail commercialism and competition in the pharmaceutical industry to promote altruism as the basis of pharmaceutical activity. Pharmacist responsibility is to help the patient and prevent health damage by releasing the right drugs for the treatment, required doses and provide information on how to use the drugs. From the traditional relationship between doctor that prescribes and pharmacist, the prescriber is always to blame for mistakes. When the patient chooses to purchase drugs without prescription, the situation changes, greatly influencing this relationship. Pharmaceutical care includes the responsibility to patients who are cared for and the society asks the pharmacist to be accounted for this responsibility. Without assistance from the pharmacist patients are likely to follow a wrong medication which ultimately can have very serious consequences. Pharmacist, while communicating with the patient based on trust and mutual respect, makes an effort to obtain the best outcome for the patient, to prevent adverse and dangerous effects of self-treatment and to improve quality of life.

Conclusion: A patient who chooses to buy a product without visiting the doctor is sacrificing the security of a professional examination and risks taking wrong medication and making dosage errors. Such is the role of the pharmacist as a supervisor and patient informer. The pharmacist is granted the pharmacotherapeutic role in the pharmacy. It may, by mutual trust, influence the patient to choose the proper medication and avoid dangerous side effects or inadequate pharmacotherapy. The pharmacist must take into account respect for autonomy, individuality and dignity of the patient. He must guide the patient so that he reaches the best solution for the treatment or to make him realize the need for professional advice while visiting the doctor.

Keywords: bioethics, pharmacist, self-treatment, responsibility, welfare of the patient

2. ACTUAL ETHICAL TOPICS OF DENTAL IMPLANTOLOGY

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Introduction: Despite of chosen professional branch, medicine imposes certain ethical principles in medical activity providing moral values of doctor's daily activity behavior and attitude. In such a way, the professional ethics sets up a system of standards and rules of conduct, which reflect some social functions of medicine: doctor-patient, doctor-doctor and doctor-society

relations... Stomatology – is a vast profession with high ethical standards, thus stomatologists must be able to face many difficult situations, being based on moral thinking and high ethical norms. During the working process in dentistry, between doctor – patient and other relations many “banal” conflicts have already appeared. These misunderstandings could be solved keeping up respecting certain established bioethical principles.

Purpose and Objectives: to elucidate some values and principles of medical Bioethics, their impact on Dentistry and Implantology, making evident the scientific achievements in these fields of Stomatology and finally to solve bioethical problems.

Materials and methods: published monographs, articles and statistical data. There were used sociological, historical – medical and bioethical methods.

Results: Medicine – is a socio-human domain, in which a doctor has a big significance doing his job day by day: as a practician, as a psychologist, as a teacher and many others. In different medical fields doctor works with the people and for the people, he or she is called „ The right hand of the God”. In Dental Implantology the doctor has the same functions and this medical field has its special rules and risks. Many difficulties may appear caused by both sides: by the doctor or patient. On doctor’s side they may be: many risks in anaesthesiology caused by the lack of knowledge in this domain, the incompatibility of the patient and anaesthesiological substances, the risk to be infected with venereal diseases caused by inadequate and insufficient sterilization and also the superficial knowledge in this area, the guarantee of the final result for personal boost and reclamation (advertising), technological difficulties which are caused by the incompatibility between tissue and implant (tissue incompatibility).

As we know there are 2 types of implants: the first method – „In one step” – when the tooth is implanted completely without osteointegration; in such a way all the risks are related to the patient. The second method is – „ In two steps” – the tooth implant is fixed into maxillary bone for osteointegration during 3-6 months. After this period of time the doctor must decide if this method is suitable for patient. In such a way only doctor assumes the highest risks concerning successful final result.

The secondary difficulties shown by the patients may be: infringement of doctor’s prescriptions before and after the treatment, avoidance to respect personal hygiene and healthy conditions of social surroundings, the great wish of patients for implants without being concerned about contra-indications of this method of Implantology.

According to all these facts presented above the large majority of risks are assumed by the doctor. As a solution to solve the main problems, to avoid the conflicts between both parts, to insure the stomatologist and patient against future complications, Bioethics offers some principles. One of them is to sign a special document (an agreement), which confirms that the patient accepts voluntarily the treatment after first-hand acquaintance with professional medical information. An “Informed Agreement” can help us to solve the problems which may appear between the doctor and patient. The lack of this agreement, as a starting point created by the freedom of patient’s self-determination and doctor’s obligations to carry out patient’s wishes, established the arbitration for medical treatment, which in its turn may have penal consequences.

Conclusions: In medicine will always exist the risks and successes concerning the treatment. Dental Implantology is a medical branch with high risks in which the doctor must pave the way for success and provide healthy conditions for each patient, but it may generate some embarrassing positions and conflicts by ethical nature. Bioethics as well as its moral values and principles can solve half of these problems, that’s why practicing this job – being a stomatologist – we must respect the principles of ethical code. Thanks to wisdom and high-level of professionalism many people can smile and they may be happy again and again.

Keywords: bioethics, stomatology, implantology, ethical conflicts, agreement

3. EUTHANASIA AND ASSISTED SUICIDE: CLINICAL AND BIOETHICAL ANALYSIS

Ceica Anna

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Introduction: Lately the bioethico-medical investigations raises the question about the legality and justice of euthanasia and assisted suicide. Although euthanasia raises medical, biological, juridical and other aspects it is useful to mention that it is mainly a bioethical dilemma. It is impossible to clarify the problem of euthanasia partly, it must be seen as a common problem, which can be solved only by profound bioethical analysis. Only this type of analysis can help to resolve the problem complexly, from all spots of view, showing that euthanasia is a problem of society, having deep social reasons and complications.

Purpose and Objectives: To clarify the problem of euthanasia and assisted suicide from medical, bioethical, philosophical and social points of view. For it is essential to show the moral aspects of euthanasia in comparison to assisted suicide in socio-medical practice, look through the arguments of "for" and "against" the legalization of euthanasia in our country.

Materials and methods: Published Scientific works and sociological questionnaires where used to clarify the question. In the process of investigation: analysis, synthesis, deduction and induction sociological, theoretical and others methods of investigation where used. Three sociological questionnaires where used; among the citizens of Chisinau, students, doctors. For each group different questions and answers where made.

Results: Basing on investigations made, was found a modality reflecting true feelings of the population of Moldova towards Euthanasia and Assisted suicide. Most of the respondents answered positively on «Are you for euthanasia?» (51 %). «Do you consider necessary for legalizing euthanasia?» (67%). «Can euthanasia be seen as free will of terminate patient?» (76 %), but on answering the question "Would you like that euthanasia would have been used towards your relatives almost?"(97%) answered negatively. Their answers were conducted by pity towards the terminally ill patient, but when the problem bothered them privately not everyone answered positively. Doctors were more straight by answering no 57% on legalizing euthanasia and 98% on using euthanasia for them. Students answered less dramatically, 23% could have assisted a suicide and every 5th could be a spectator during the process.

Conclusion: Trying to resolve the problem of euthanasia and assisted suicide we stand on the margin of two different sides. It is impossible to make a conclusion about legalizing euthanasia, it is crucial to develop a juridical procedure of euthanasia, because a big role stands on the opinion of society.

Keywords: bioethics, euthanasia, assisted suicide, sociological investigation, justice

4. OCCUPATIONAL HIV INFECTION IN HEALTH CARE WORKERS: WHAT TO TAKE INTO ACCOUNT?

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Introduction: Through the nature of their profession, the workers of the medical system, doctors and nurses, are assuming the exposure to pathogen factors. The primary prevention is the main objective and all the efforts are supposed to be directed in this way. Though, to err is human and sometimes accidents happen. What is to be done in this situation?

Purpose and objectives: The aim of this paper is to present the ethical aspects of the occupational acquired HIV infection in health care workers, starting from a real case.

In the Intensive Care Unit, while inserting a peripheral venous catheter, a doctor accidentally causes an injury to his finger with the contaminated needle. The patient was known as HIV infected and under appropriate treatment. The blood tests proved that until that moment the doctor was

healthy. According to the protocol, new blood tests were performed after 6 months, demonstrating the presence of antibodies against the Human Immunodeficiency Virus type 1.

Discussion: In this situation, there are some ethical issues regarding the doctor and his patients as well, because this relationship represents the fundament of the medical act.

The HIV positive status of the doctor heightens several aspects to reflect upon. Should this person be allowed to keep working in the medical system? Then, may changing the specialty be required, particularly in the case of the surgical departments? In what measure will this doctor be supported by the administrative structures?

But there are also things to see and understand from the patient's viewpoint. Would he accept being treated by this doctor, if he knew his status? Because indeed, the patient has the right to choose the person that will consult and treat him. However, the main controversy is that the decision will not be so much influenced by the real risk of transmission, which appears to be quite low in the scientific literature (under 0,3%), but primarily by the patient's lack of knowledge and the phobia that persists around this disease.

Conclusion: Occupational accidents in the medical system are a reality. Beside the human sufferance, the HIV infected health care worker will also fear the social and professional repercussions. Moreover, it would not be equitant for the patient to be exposed to the risk of infection, even if that is considerably low. Obviously, everyone's priority is the prevention, but if it happens, which could be the most ethical solution and the best for everyone?

Keywords: HIV infection, occupational exposure, health care workers, risk of transmission

5. THE ETHICAL CONDITIONALITY OF THE DIALECTIC INTERRELATION OF THE HEALTH, ILLNESS AND PATOLOGY

Dzyuba Bogdana

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Introduction: The norm — is a level of functioning of an organism which is peculiar and is typical to the majority of people, the norm is the unification of various forms of activity of the organism therefore one of them is admitting satisfactory and the others are beyond the admissible. Thus, in the concept of the norm can be included evaluative, prescriptive components: a person should be or not be otherwise. Anything, which does not correspond to the ideal, is declared abnormal, pathology or disease. The problem of norm/pathology is connected with the problem of a choice of standard group — people, whose activity serves as the standard according to these, we can measure the level of functioning of an organism and the personality. Depending of the occurrence (for example, psychiatrists or psychologists) can include in standard group everything what is a normal one and can establish various borders of norm.

Purposes and Objectives: 1) Pathology, health and illness, as in theoretical and ethical definition. 2) Role of the relations into the doctor and patient, in effective definition of transitional states from health to pathology and back. Common goal — is to detect the necessity of definition of the ethical components in process of correlation of the health, illness and the pathology. On this basis, we should achieve the following problems: to define a role between the doctor and the patient, in effective identifications of transitional conditions in human organism from health to pathology; also to prove an illness, pathology and health in theoretical and ethical definition.

Materials and methods: Using of the published scientific works (the monographs, articles and reports), ethical codes; statistical materials and various discussions in the Internet sphere. Also were used the material analysis, historical, medical and statistical approach, statistical comparisons etc.

Results: The illness isn't mere chance, on the one hand, and fatal inevitability — with another. The illness is the natural phenomenon in existence live, but it doesn't mean necessary and obligatory manifestation in the life of every individual organism. The object of examination of the pathologist is a

pathological process which is different from norm, and the subject - the most general regularities of its origin, course and outcome. The pathological process — is a biological process, a special form of state of living systems. The task of the pathologist is to analyze deeply and comprehensively the various parties, aspects and levels of pathological process. The theoretical pathology is based on a number of the philosophical, dialectical materialist processes on which the theory of pathological process is based. On the social level of functioning of the human organism- the norm and pathology acts as states of health and disease. Illness in this case is not any frustration, but only one which needs to change, in requiring of treatment which is not the norm but the pathology one.

Conclusion: Nowadays in medicine modern doctor must use effectively ethical principles of norms and values in therapeutic process of treatment of the patient. Defining value has such approach in consideration of the most difficult correlation of health, an illness and pathology.

Keywords: ethics, health, illness, pathology, medical process

6. THE CONDITION OF DOUBT IN PHARMACEUTICAL PRACTICE: BIOETHICAL ASPECTS

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Introduction: Veracity is one of the principles of biomedical ethics that set truth telling as a rule in medical professionals' relations with patients. However, in daily pharmacy practice, the principle of veracity is violated in different ways: by the act of lying, omission or by deliberative cloaking of information in jargon or language that fails to convey information in a way that can be understood by the recipient or that intentionally misleads the patient. Sometimes, the pharmacist faces a problem of what the patient should be told, because he (the pharmacist) is not yet sure what the facts are, situation which in health care is referred to as the "condition of doubt". This problem also relates to the ethics of relations between health care professionals. Often, in daily practice, pharmacists when filling in doctor's prescriptions might disagree about the assigned medication and based on their legitimate right to "correct" doctor's "potential" mistakes, might suggest a safer alternative for the patient. This leads to conflicts between pharmacists and doctors in patient's treatment.

Purpose and objectives: Analysis of moral dilemmas related to the "condition of doubt" in pharmacy practice on behalf of bioethical principle of veracity and ethics of the relation between medical professionals.

Materials and methods: The research was based on the analysis of relevant scientific literature (articles, conference and symposium papers), case studies and ethical (bioethical) codes of medical professionals through the application of analytical, bioethical, comparative, medical-historical methods.

Results: The traditional Hippocratic medical code of ethics does not require that medical professionals deal honestly with patients and accept lies when they produce more good than harm for the patient, while the modern ethical codes, following the principle of veracity, consider truthfulness as part of the essential characteristics of the pharmacist. Veracity focuses on the inherent moral element, such as the patient's right to be told the truth. Before disclosing information, the pharmacist should have the sense of exactly what he should tell the patient. The confusion referred to as the condition of doubt may be in regards to a diagnosis about which the pharmacist has only a preliminary suspicion (in case of innovative therapies where the effects of therapy are not very clear) or the pharmacist has only a limited understanding of the patient's condition (compared with the doctor's knowledge). The professional codes foresee that if the medical professional does not possess enough knowledge or experience in order to guarantee adequate care, he or she shall consult other professionals or guide the patient towards further advice from another medical staff. However, in practice this rule is not always respected neither by pharmacist nor doctors. Facing the condition of doubt alone, the pharmacist either lives with the uncertainty, or risks being dishonest leading to the quality of the pharmaceutical care being affected.

Conclusion: moral dilemmas of condition of doubt can be resolved considering the reasonable person standard (the pharmacist should say what the reasonable patient would want to

know before consenting) and the principle of autonomy (the patient must be told what he or she needs to know to make an informed choice, even if the information is doubtful) and developing a more advanced pharmacist-doctor working relationship system.

Keywords: bioethics, pharmacy, veracity, condition of doubt

7. BIOETHIZATION OPPORTUNITY OF THE MEDICAL STUDENTS IN THE PRECLINICAL YEARS OF STUDY

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Introduction: The evolution of medical knowledge is situated between two apparently opposite tendencies: the exacerbation of realism and undoubtable needs, and, on the other hand, accentuated extension of the humanistic and philanthropic concepts. Placing this two antagonistically orientations in an equation, gave birth to a discipline that is meant to equilibrate the transformation of the human destiny under the pressure of science. Bioethics can be defined as an ethic and multidisciplinary demarches, that makes the humanist and moral values of a person compatible with the science development, according personal actions with this ethical-moral values. In this context we may affirm that bioethics are the cross point of the moral norms with the technical-scientific progress. The bioethization of medical students, involves values and norms which perpetuates humanism without distorting the basic purpose of medicine.

Purpose and objectives: Highlighting the importance of the bioethization process among medical students in the preclinical years of study, in order to form the moral conscience of the future doctor.

Materials and methods: There were used various specialized materials (publications, courses, analytical programs, etc.). It was given priority to sociological analysis of practical situations involving concepts of morality, as well to analytical, bioethical, and medical methods.

Results: During his academic and scientific training, medical student often find himself in contradictory situations that need a complex approach through the prism of moral values and trough the perspective of medical sciences. The bioethical demarche, starts from the basic idea that not everything that is medical possible is also moral. Different from the unilateral approach of traditional ethical systems that are up to an idealized approach of the human being, bioethics studies the person in his social-cultural and natural relations. In this context we may affirm the fact, that surviving becomes a key concept of the present, invoking evolution demarches, but which are equilibrated by moral values and norms. Therefore we can say that life, humanity and survival are some categories that complement each other, mutual explaining their essence, leading the activities of the future doctors, to further progress in accordance with the imperatives of bioethics.

Conclusion: The wellbeing, life, and health of the patient is the primary concern of a doctor, not only because it is his professional duty, but also because, in such a way, a doctor reconfirms his professional choice, the purpose of training and developing himself, the main reason of his continuous improvement process, reconfirming each time his value, not only as a doctor but as a human being too. From the bioethics perspective, the need for science implies a need for morality and, conversely, from need of morality, should result more scientific advancements. The higher is technologization of medical exercise, the greater is the need for morality in its practice. The higher health risks are, the greater is the need of medical care based on humanity and need to increase quality of care. The easiest ways of assimilating bioethical knowledge by medical students are in the preclinical years of study, fact that was proved abundantly in our research.

Keywords: bioethics, bioethization, morality, medicine, medical education, medical students

8. THE SOCIAL STATUTE OF THE MEDICAL STUDENT IN ETHICAL SPACE

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Introduction: Finding the place of the medical student allows to clear up his social role, distinguishing the responsibilities of the student, establishing moral values which he must possess, to cultivate and to develop them in the process of his professional formation. The social statute of the student is directly linked to his future profession, so, like the doctor, the student must already assume his corresponding moral values, assimilate and exercise them in achieving his personal and professional career.

Purpose and Objectives: The basic aim is to highlight the ethical issues of social status that is the student in medicine. In determining the social status of medical students it is necessary to highlight such objectives as: detecting specific features that distinguish them from other groups of students, elucidating the importance and the consequences of their choice, highlighting the responsibilities of rising young physicians in training.

Materials and methods: Sociological, statistical, bioethical and medico-historical methods were used for understanding and appreciating the idea wrote forehead. The study is based on a sociological research that includes interviews made on different grade's students from the medical university and even on other non-medical university's students.

The result of the discussion: Gained results show that each medical student assigns a better and a superior social level comparing to his fellows students. The medical student is positively marked by the admiration for his future profession that imposes to the growing doctor consciousness, perspicacity, soul nobleness, self-sacrifice spirit, responsibility, professionalism etc. It is clearly seen opposite positions between different students from different faculties connected largely in the specific educational activities. The medical student is a front ranker by the enhanced informational volume of studied disciplines, access to specific teaching materials of the medical faculty, interpersonal increased contact with other people etc. The professional formation on ethical levels imposes the medical student a lot of concept problems that should determine his value, his place in the society, the choosing of an ideal, the student's attitude and responsibilities for the society.

Conclusion: The medical student possess a major social level that determines him to unfold a veritable moral activity to self-education, to discover his own originality for individualizing personal tasks, social and professional ones.

Keywords: ethics, medical student, social status, moral values

9. BIOETHICAL ASPECTS OF ENDOCRINE DISEASES CAUSED BY THE ENVIRONMENT

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Introduction: Nowadays we have a lot of negative factors against the health of population. Progress led to, that each day the atmosphere is polluted, which leads to increased endocrinological pathologies. It is crucial that doctor provides maximal bioethical approach towards the patient right now, although a lot of problems are found in questions resolved by bioethics. Basic bioethical aspects in endocrinology are the problems of confidentiality, informed agreement of the patient, problems of medical mistakes.

Materials and methods used: were used various bibliographical materials, internet materials, statistical articles (published and not published) for more objective and more detailed theme presentation. More common methods in this investigation were: historical, statistical, bioethical, biostatistical.

Results: in the course of analysis of multiple sources were found a lot of toxic substances or endocrinological system: polychlorinated biphenyls, polybrominated biphenyls, folic acid, DDT, etc. The bioethical problem consists of that doctor doesn't always know which solution to take in order not

to harm the patient. The problem of truth consists that, truth doesn't always lead to the moral well being of the patient. Some investigations have shown that 60% of the patient after they know that they have diabetes fall in depression. Informed consent is actual because the patient must always know the goal of investigation. The medical secret must remain a secret in order the patient to believe in the doctor. Discussions about medical mistakes doesn't cancel the doctors responsibility, and that sometimes a doctor makes a decision not having the true base for making it.

Conclusion: The doctor-patient relationship must be based on respect. Doctor must be a person which can not only treat but also listen the patient. The highest level of bioethical "comfort" will lead to the quickest treatment of the patient.

Keywords: bioethics, endocrinology, confidentiality, informed consent, polychloricbyfenyls

10. THEORETICAL SETUP OF ESSENTIAL BIOETHICAL ASPECTS IN MODERN STOMATOLOGY

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Introduction: The objective of this study was to outline the essential bioethical aspects in modern stomatology as there are fundamentals questions concerning dentistry as a profession, the patient-dentist relationship and oral health that must be addressed to form a relevant to practice basis of dental bioethics.

Materials and methods: For the project were used published scientific materials (monographs, articles, collections of scientific forums) statistical textbooks, internet sources, personal observations in contact with patients at the practical lessons. The used methods are: analytical, comparative, bioethical, medical-historical, statistical.

Results: The general aspects of bioethics in dentistry are: theoretical bioethical approaches specific to stomatology, assessment of the relationship between dentist and patient, the analysis of bioethical issues for dental scientific researches, the discussion of multiple clinical cases. More other aspects and issues arise from the general ones: the complex of problems raised from the transplantology field, bioethical aspects derived from the technological advances, the costly innovations such as CAD/CAM technology, application of lasers and implants; which do not only increase the care quality but also make it inaccessible to some social classes.

Conclusion: Modern stomatology challenges bioethics to study and solve some important problems starting with the inexhaustible dentist – patient relationship and its variety of situations and finishing with the most pressing: the current oversupply of dentists which has implications for issues of care quality. Stomatology has always been sensitive to issues of public opinion and professional status that is why bioethical investigations could exceed the theoretical and medical environment, offering new recommendations and solutions.

Keywords: bioethics, modern stomatology, affections

11. MEDICAL STUDENTS' ATTITUDE TOWARDS ETHICS, NEEDS AND CHALLENGES AS POTENTIAL PALLIATIVE CARE VOLUNTEERS IN REPUBLIC OF MOLDOVA

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Introduction: Resulting from an increasing number of chronic pathologies, life threatening conditions and ageing in general population there is an emerging need to develop palliative care services that will be integrated in healthcare system. Volunteers have an important role in palliative practice

reducing the costs of the service, rising awareness of medical issues in society and showing their own example in active civic involvement. As palliative care is in development in Moldova, future doctors should receive relevant education in this branch in order to bring their own contribution.

Purpose and objectives: The aim of the study is to evaluate medical students' availability, ethical views, barriers and facilities for participating in palliative care programs as volunteers.

Materials and methods: A 6 pieces questionnaire including single/multiple choice and free answer options was designed for the study. The survey was composed from items referring to barriers and facilitation of volunteering, self evaluation of knowledge in terminal illness management, ethical dilemmas and moment of palliative intervention during clinical management. The survey was completed by 42 undergraduate students.

Results: Despite the fact that most medical students self estimate their knowledge and level of information in palliative care as low (45%) or medium (52%) the majority of them (83%) said that would be available and interested to participate in this field as volunteers, main motivations and facilities for the activity constituting: support from an experienced team, educational courses on palliative care and communication. At the same time barriers for volunteer work are lack of time, emotional/spiritual aspects and uncertainties regarding professional capacity. Pain control or psychological interaction between medical personnel and patient are the few ethical issues identified by students as less then 15% gave an answer to open question about moral and deontological dilemmas that could arise within palliation.

Conclusion: Palliative care is an relatively new and optional study subject at the State University of Medicine and Pharmacy from Moldova that is why it is reasonable to regard volunteering activity in this field as a type of medical education gainful for all participants including students, caregivers, patients and state institutions. Thereby it would be opportune to offer methodological and practical support for students towards ethical normative and moral issues within palliative practice.

Keywords: palliative care, volunteering, medical ethics

12. ETHICAL ISSUES IN ELDERLY PATIENT-PHYSICIAN RELATIONSHIP

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Introduction: Old age is a very difficult age in which people who once were full of life, get to a moment when they can no longer take care of themselves, and their diseases take power over them. Overpowered by pain and scared of death, which seems to be even nearer, the elderly address more and more often to doctors, hoping to find the right solution for the problems that overwhelm them.

Purpose and objectives: The purpose of this project is to disclose the ethical aspects of medical work in dealing with the contingent of elderly patients, to find and motivate the necessity of nursing in their treatment and the effect of communication between the doctor and the elderly patient.

Materials and methods: The survey is based on scientific publications, testimonies of 20 elderly persons who are registered at the Social Welfare Chișinău and some clinical cases provided by practicing physicians.

Results: UN sources indicate that today the number of people aged over 60 years in the world has reached 500 million. In 2025 the number of elderly population will reach over one billion, which is about 15 % of the world population. There is also the term "aging of the elderly", which can be explained by increased share of the population aged over 75. Since this demographic problem is growing, physicians are forced to face a greater number of elderly patients with different problems. The aging involves physiological changes of the human body with function decreases. This is why the doctor's main task is to distinguish normal age changes in patient's complaints from symptoms of a disease. And it can only be achieved during a close conversation with the patient, from which the doctor has to extract the maximum possible information in order to provide an

efficient treatment. Because of the same age changes of the patients, like attention weakening and diminishing coherence, the medical act becomes quite difficult. Unfortunately, we live in a busy world and our time is limited, and many old people complain that doctors do not listen, they only give them some vitamins without performing a complete medical examination, or, even worse, they send them home unsatisfied. Such an attitude not only damages the doctor's status in the patients' eyes, but also offends the latter, making them feel unimportant and pointing their loneliness. Thus, because of the lack of time, the doctor let the pathology manifest itself, which is contrary to the essential mission of the doctor to save the life of others. Also, the long queues at the doctor's door lead to deprivation of the necessary curative act for the patient. It is therefore essential to organize a network of training specialists in medical ethics. However, besides treating, the role of medicine also consists in easing and improving the lives of the sick, not only with drugs but also by moral leverage.

Conclusion: Activation of geriatrics at its maximum potential will be possible only when the gaps and the ethical problems which both patients and doctors meet in their way, will be removed and solved. This, however, will be possible only when doctors will have ethical knowledge and will apply it in dealing with their patients.

Keywords: geriatrics, ethics, old age, problems

13. COMMUNICATION IN PARTNERSHIP WITH THE PATIENT: ETHICAL ISSUES

Niculița Sergiu

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Introduction: Communication is a set of actions in the transission of information between two persons. The term „ communication” is tied to our existence as people, then as a society, because human beings are interdependent and communicative. Without communication and language we, as being that interact and relate in most, or even all through the act of communication, our existence on Earth would be pointless. Communication in relationships also presents a factor that highlights social issues and seeks to answer them through collaboration and exchange of information between individuals. With the advent of communication as a basis for building human relationships has a major influence on communication and the medical practice (doctor – patient), thus having a great impact on the health issues of the patient (correct diagnosis, collaboration between doctor and patient indication of deviations negatively health, etc.).

Purpose and Objectives: Solving problems in cummunication between doctor and patient for better treatment of the disease relying on our ethical aspects.

Materials and Methods: International published materials where are highlighted the issues of communication, using sociological methods to determine a prejudicial relationship between doctor and patient.

Results: Communication takes many froms and is found in various situations, the most important of them being that between doctro and patient, which povides much of the data needed to establish the diagnosis. Also, the communication becomes even the single treatment modality in cases of chronic diseases through advice, support, finding information is required lifestyle disease. Improving relationships between physician and patient involves understanding the complexity and subtlety of interpersonal behavior. Patients' satisfaction with medical care received – patients tend to emphasize the personal qualities of the physician, to the detriment of technical skills, professional. Good communication between doctor – patient will largely decrease the risk of mutual misunderstanding and decrease the risk of a conflict after a medical error. For the effectiveness of good communication is necessary to fulfill some requirements or guidelines: recommendations and guidelines are initially given by the doctor; to use short clear sentences (both doctor and patient as); information issued shuold contain a logical message; patient data and written information, in order to guide when appropriate.

Conclusion: The life and quality of patient should be under medical utmost importance for those involved in the treatment of disease. Communication is the basic pillar that creates the degree

of effectiveness of the treatment of the disease, because it is strong link between patient and doctor. In an enormous extent on both sides, both in medical and patient communication are dependent only that its effectiveness depends on the manner and degree to use them. Each of doctors, with a high social status in society, having relationship, rich communication with both patients and colleagues as communication must rely on ethical issues well pronounced.

Keywords: communication, doctor – patient relationship, ethics

14. BIOETHICAL APPROACH TO CURATIVE TACTICS IN SYPHILIS IN PREGNANT WOMEN

Ojovan Vitalina

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Introduction: Active engagement of bioethics in modern medical act opens new opportunities for a successful accomplishment of the curative process in case of pregnant women with syphilis. The multidisciplinary ethical approach of bioethics reunites the capacity of the course treatment with the contingent suffering from this venereal disease, which is extremely dangerous both for the woman herself, as well as for the future child. Contemporary social reality and civilization emphasize two major trends: on the one hand, syphilis medication in pregnant mothers is complicated, due to the fact that this disease has a deep social conditioning. On the other hand however, a broad scientific and curative experience with vast possibilities of solving problematic situation is being accumulated. In this respect, bioethics comes to assert its role as an efficient solution and catalyst of the respective possibilities.

Purpose and Objectives: The main purpose consists of pinpointing the possibility of bioethics' implication in different aspects of the process of treatment of syphilis in pregnant mothers. In connection with this major goal, the accomplishment of the following objectives is necessary: presentation of the medical bioethics potential in dealing with the subjects of the venereal diseases treatment in certain social groups with high risk for life and health; bioethical approach to the doctor-patient relationship of information consent type; active monitoring and effective involvement of the respect of bioethical principles at all stages of the curative process; highlighting the efficacy of the ethical potential in studying the correlation: venereal disease – social framework etc.

Materials and methods: Use of corresponding specialized materials: relevant scientific literature (monographs, articles, collections of conference and symposium papers); statistical and sociological edited sources; clinical protocols; case studies; ethical (bioethical) codes etc. The application of the clinical-analytical, bioethical, comparative, medical-historical and biostatistics methods has been opportune.

Results: In Europe and Central Asia, but especially in autochthonic space (Republic of Moldova) a persistent increase of syphilis morbidity has been noticed. The offensive incidence of syphilis among women, including pregnant mothers, is also growing. This fact enforces an improvement, a high-quality transformation of the curative process elements and its management in case of pregnant women. The respective disease is closely linked to social realities existing at the moment in the region, directly depending on such factors as: low living standards of population, precarious level of individual education and sanitary culture. The role of medical and social bioethics' implication in the process of monitoring and cure of syphilis in pregnant mothers increases in such conditions. The bioethics „tools” become potentially active and efficient mainly on segments of interference between social framework and the one of venereal disease in pregnant women contingent. At the same time, a special role to the doctor-patient relation based on informed consent model is being conferred. Each phase syphilis treatment in pregnant mothers arouses certain theoretical and practical applications offered by the live ethic arsenal. In this context, the major role of (theoretical and practical) bioethics committees, (theoretical and practical) bioethics education of doctors in the field and elaboration of corresponding codes of ethics is being visibly accentuated. The need of introduction of a new special division in clinical protocol is imposed.

Conclusion: In current conditions, an increasing role in the curative process of syphilis in pregnant women is attributed to bioethics. Appropriate involvement of bioethical principles potentially streamlines the medical act, supplementing it with new elements and opportunities and orienting it towards evident positive effects.

Keywords: bioethics, medicine, medical act, venereal disease, syphilis, pregnant women

15. THE ETHICAL APPROACH OF MEDICAL STUDENTS LIFE AND HEALTH DURING PRECLINICAL YEARS OF STUDIES

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Introduction: Teaching courses that emphasize the importance of multilateral conception of life and health during the first years of studies at Medical University have a great importance nowadays. The actuality of this theme is distinguished by the fact that students being deeply involved in studying some subjects can ignore not only the medical importance of this conception, but also its value.

Purpose and Objectives: The main purpose of this work is to improve medical students' life and health ethical approach during preclinical years of studies. In order to emphasize this purpose it's necessary to point out some objectives, such as: to form and strengthen some adequate ethical visions to this type of students; to test these students' mood concerning their own beliefs about the value of life and health; to form efficient methods concerning the implementation of these values during clinical years of studies and afterwards in medical practice.

Materials and Methods: Different scientific materials published related to this subject have been used in this research. There have been applied the analytical, bioethical, comparative-historical and sociological methods.

Results: Courses that contain information about ethics are welcome in the process of forming and developing some ethical visions about life and health during the first years of studies at the Faculty of Medicine. This may essentially contribute to the formation of a new opinion about the real value and importance of life, thus, being a support for the clinical years, implementing these conceptions in medical practice. There have been made different investigations among 1st year medical students, among 1st and 2nd year students of Faculty of Medicine and Faculty of Dentistry. As a result, it has been established that 47% of them lack a consolidated ethical attitude about life and health. The majority of them showed a favorable attitude in adequate specifying of ethical values of life. Therefore it's necessary to study thoroughly the process of developing a proper moral-spiritual attitude of students in order to facilitate the easier assimilation of values "life" and "health".

Conclusion: To consolidate ethical positions concerning the correct conception of values "life" and "health", it's necessary to motivate medical students by establishing some well-defined aims during the process of clinical studies.

Keywords: Ethics, bioethics, life, health, medical students, values

16. THE COMMUNICATION AND THE RELATIONSHIP BETWEEN THE FAMILY DOCTOR AND THE OBESE PATIENT IN THE RURAL AREAS

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Introduction: The obese patient is a person that not only has a health problem, but will develop in the future a series of attitudes which will affect him psychologically, leading him to certain behaviour.

Purpose and Objectives: The study highlights the importance of a good communication between

the family doctor and the rural patient. In the same time, it highlights the efficient relationship between them, so that the therapeutic solutions will be the expected ones, with maximum efficiency.

Material and methods: The base of our study is a psychological method, named questionnaire, applied to a sample formed of 10 subjects – family doctors and 50 subjects – patients from the rural environment (60 in total).

Results: The processed data relate that a change in strategy is necessary as regarding the approach and communication with the obese patient, rural areas representing here a reference point.

Conclusions: Obesity is a serious problem of the modern society. It is important to inform people about this disease and to encourage them to follow a healthy lifestyle. The family doctor is the core of the health system therefore disease and the environment of origin should not be an impediment in the relationship between the two actors.

Key words: family doctor, patient, rural environment

17. THE IMPACT OF THE SPIRITUAL DIMENSION IN DETERMINING ANXIETY AMONG MEDICAL STUDENTS FROM TÎRGU MUREȘ AND CHIȘINĂU

Mateiciuc Cezar, Mitroi Mariana

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Background: Relying on faith during the stressful moments of the everyday life, is an extremely debated theme in many of the psychological and psychiatric books. Every time we face a strenuous or difficult moment in our lives that exceeds our physical or mental abilities, faith seems to be the most common way of overcoming stress, depression and the lack of meaning of our existence.

Objective: The purpose of this study is to evaluate the impact of the spiritual dimension in determining anxiety among medical students from Targu Mures and Chisinau.

Material and method: In order to accomplish this study we used the S.T.A.I. (State Trait Anxiety Inventory) and D.S.E.S. (Daily Spiritual Experience Scale) questionnaires, on a total of 211 students, of which 101 from Chișinău and 110 from Targu Mures. For the statistical results we used Graphpad.

Results: According to data analysis we reached the following results: there is a significant difference between the level of anxiety of the students from both universities ($p=0,0053$), but also a disparity concerning the students from the final years of medical school ($p=0,0103$). As far as the spirituality is concerned we noticed a significant difference only for the students from years 1-2 and 5-6 from Targu Mures ($p=0,046$).

Conclusion: Even though the level of spirituality is similar for the students from both universities, the degree of anxiety varies. The first two years of medicine at both universities go with an equivalent level of anxiety, while in the final years a significant difference can be observed. The variation of spirituality for the two categories of students varies only in Targu Mures, while in Chișinău the rates do not change.

Keywords: students, spirituality, anxiety, S.T.A.I., D.S.E.S.

18. BIOMEDICAL ETHICS COMMITTEES IN ACTIVITY PRACTICAL AND THEORETICAL ASPECTS

Postica Anna

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Introduction: Purpose theme in this thesis is to examine the place and role of ethics committees, the effectiveness of their work in the area of public health in the country, will also be determined by the specifics of these committees in various branches of practical medicine. Topicality is determined by the fact that until now have not been fully overcome or removed some defects of medicine - lack of responsibility, careless attitude or attempted fraud and scam. These adverse events causing adverse

reactions in patients, which creates some stereotypes about medical workers, ranging from distrust, suspicion or disrespect. Analysis is needed, research or case record that creates a negative image of the medical profession. It is here that ethics committees can be extremely useful.

Materials and methods: Assessment questionnaires, as well as work ethics committees in two hospitals in Chisinau, and that various scientific sources: articles, journals, monographs, textbooks.

Results: I have discovered as a result of our investigations that in the last 10 years in Moldova were made some moral surveillance measures doctors' work. On 16 March 2001 he founded the Association of Bioethics in Moldova. The Association is a voluntary public organization nongovernmental out of politics and established by the free will of persons associated. In the medical schools in the capital, was founded National Center for Bioethics in Moldova, in the Association of Bioethics in the country with the financial support of UNESCO. On 1 March 2005, according to the Minister of Justice of the Centre is authorized and it gives us the opportunity to meet a whole intellectual forces of the Republic of Moldova on bioethical knowledge. Create and work ethics committees in the field of science and biomedical research, is a relatively new phenomenon. Their appearance may be subject to a public debate about multitidine infringement and misuse of human pesoanele context of biomedical research. Bioethics, as a recent phenomenon, it is necessary as a link between science (medicine, biology, etc..) And moral. In any case the man appeared to be respected as a whole, avoiding abuses and promoting freedom of expression of every individual. This raises the need for organizing groups (committees) of specialists from different fields to reflect problems in the relationship between science and life from many angles. Making a study of the activity of Bioethics Committees (Ethics) in different countries. But nevertheless, the composition of Bioethics Committees largely consisting of doctors and nurses (60-70% of total membership), people outside the medical staff (1-2 persons) approved by the Steering Committee of the Hospital, a lawyer outside the Health Department, a physician with special expertise in ethics (bioethicist), a priest, approved by the Committee. The head physician meetings is usually one with special training in bioethics. Facilitated communication between different parties and opinions discussed rationally and specialized consultations are committees working methods that allow accurate assessment of morally questions arising. Committees of Bioethics is patient welfare, while protecting the interests of both parties in the doctor-patient relationship.

Conclusions: study activities in our country Bioethics Committees have demonstrated that the majority perform their functions by standardized protocols, and go hand in hand with all reforms in medicine.

Keywords: biomedicine expert committee

19. SPONTANEOUS ABORTION: MEDICAL AND BIOETHICAL ASPECT

Şpac Eugenia

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Introduction: Spontaneous abortion is a complex human problem, a particularly intense personal experience for most women and that put face to face, the contradictory rationalizations of moral beliefs relating to human development, identity, family structure and its functions, human relationships and the confidence In the future.

Purpose and objectives: To examine aspects of bioethical and medico-social aspects of spontaneous abortion.

Materials and methods: The study has served scientific published material (monographs, dictionaries, collections of articles of international conferences devoted to the medical and bioethical issues). Sociological and statistical publications, also was a clinical case study.

Results: Medical terminology, spontaneous abortion is the spontaneous loss of pregnancy (through a natural cause, without intervention from outside) before 20 weeks of gestation (spontaneous

elimination of product design after 20 weeks is called spontaneous loss in advanced stage of pregnancy). Spontaneous abortion statistics are dramatic, the AvS occurs in 20% of all pregnancies. However, according to some sources, this is not the correct number. Many women, before they realize that they began to form life, miscarry without knowing it-just experimenting their spontaneous abortion is a heavier period. Therefore, the spontaneous abortion rate may be closer to 40% or 50%. The number of women who miscarry, 20% it is possible to have a spontaneous abortion. There is a therapeutic modality to be stopped in AvS development (in progress). If they are not present symptoms of massive hemorrhage, fever, weakness or other signs of infection, you cannot change the abortion rate. AvS is something natural and that's why the doctors take a position of expectant. When the AvS take place, the woman loses not just a burden but a child and her dreams for that child. Negative emotional reactions (self - blame, anxiety, sadness or mourning) are normal after the loss of a pregnancy. Coping with spontaneous abortion requires understanding the myths about pregnancy loss. Many spontaneous abortion myths about a grieving mother to believe that she should blame for the death of the child, which often leads to further development of post-abortion syndrome.

Conclusion: Spontaneous abortion would be much easier to bear if you hang the weight of silence on the subject. It is, unfortunately, an awkward topic in our society. The silence surrounding the subject, cause greater psychological pain for the grieving mother, since it is unable to mourn openly and properly. Unfortunately, in a society preoccupied with the debate over whether an embryo or fetus qualify as human life, a woman may not find a corresponding confirmation of her loss. Why a company uncertain about the status of the fetus, not to provide the same sympathies for a spontaneous, as well as the death of a toddler? If a child is not considered lost, what woman is still grieving and suffering? Many women who have experienced pregnancy loss, they love the embryo or fetus development precisely as a kid, even though he spent little time.

Keywords: AvS-spontaneous abortion, pregnancy loss, post abortion syndrome

20. ETHICAL ASPECTS OF THE CORPSES STUDY

Știrșchii Viorica

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Introduction: In order to train qualified medical staff, the study is performed on the corpse, which is the basis for achieving the intended educational goals. The way of using corpses in dissection activities, should include mandatory ethics component necessary, because human material is invaluable, even if not alive; through the practical application, through the concrete way in which take place the specific dissection methods, both teachers and students should not bring any damage to the intrinsic value of the body.

Purpose and Objectives: Highlighting the ethical aspects of corpses study. Also, defining the social utility of human body dissection according to medical prescriptions, and the need for proper students' ethical attitude towards it. There have been described legal, ethical, bioethical dissection of corpses.

Materials and methods: Scientific publications of different type related to the subject . Corpse's material at the practical lessons of the anatomy. There have been used analytical, practical (participation in tissue handling, corpses'organs), bioethical,medical-historical comparative methods.

Results: Debates on bioethical essence, mostly, have a central point of interest the life of the person but there are required and studying methods of dissecting human corpses. Dissection procedures affect the integrity of the body of the deceased as we accept that we owe respect to the human body (as it is a projection of the individual post mortem alive), it creates a seemingly irreconcilable conflict between the need of unfolding these procedures on one side , and on the other side to physical integrity of the person.It is very important, from the ethical standpoint, to pay respect to the human corpse because the human body, even if it is lifeless, has an intrinsic and sacred value. Performing the study on the corpse, will be guided by respect to the corpse as a former human being. The human body retains even in death a recognizable form, which requires respect for

the identity of that person. Indirectly speaking the way we treat the human body is reflected on how we treat the living people. Another argument is considering our desire to respect the memory of the deceased. Corpse is the material bearer of a myriad of events, that persist in our memory opposite the deceased. We must consider the moral and religious significance of the human body. Even if Christian doctrine clearly distinguishes between body and soul, we must not forget the promise that gives us the religion. Actual respect that we must have for the body of the deceased is a "preview" that we will respect the human body after its revival. Therefore from a religious viewpoint, the disrespect for the human corpse would mean not only an inappropriate moral and ethical attitude for the deceased, but also it represents the entire human existence and the whole of humanity.

Conclusion: The use of human corpses for teaching must be performed by means of bioethical principles revealing the intrinsic ethical value of the it. During the study process students need to apply these principles.

Keywords: ethics, bioethics, corpse, anatomy

21. THE MEDIC-PATIENT ETHICAL RELATIONS IN THE CONSULTING PROCESS OF THE MODERN FEMALE PATIENTS IN GYNECOLOGICAL MATTERS IN CONNECTION WITH NERVOUS SYSTEM DYSFUNCTION

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Introduction: The health of the modern female organism directly depends on ladies' relation towards their own sexual health, participation and influence of the gynecologist on sexual health, and stress reactions in general.

Purpose and Objectives: Detection of the ethical components of gynecologist's therapeutic tactics for young female patients with the detected dysfunctions of the nervous system. Identifying the level of contraception, and planned consultation with the gynecologist. Detection of the ethical principles and values, which are necessary for medical assistance. Elimination of the problems, created by non-compliance with professional duties. Definition of specificity of medical impact of the neurological problems, with the help of ethical assistance.

Materials and methods: Published scientific studies, materials of the sociological survey (questionnaire and interviews). Statistical, analytical and bioethical methods are used simultaneously with anonymous questionnaires of a group of girls; online forums study, and also gynecologists' data obtained with the help of interview.

Results: Disadvantages of ethical education, lack of awareness of the female population about contraceptive methods and need for regular gynecological examinations; lack of caution and discipline in choosing sexual partners, detrimental effects of stress on the body- that's why we have a large number of unwanted pregnancies and, as a consequence, a large number of abortions as well as sexually transmitted infections. A survey that had been conducted on the group of students (aged 22 to 27 years) had indicated that 63% complained about the failure of the menstrual cycle on the background of the transferred stressful situations. The major part of girls became sexually active women aged 18-19 years, 60% of them are sexually active; 46.43% of girls use contraception, the rest 53.57% don't use any contraception. Girls have obtain the information about contraception by the following ways: 2.77% in medical college; 13.88% at school; 13.88% from the Internet; 16,66% from parents; 25% from friends; 27,77% from a doctor. 51,51%, answered positively on a question if they had ever obtained gynecological consultation regarding contraception, 48,42% answered negatively. 90% of the respondents are having regular routine gynecological check-ups, 82.14% have a regular sexual partner. This and other data suggests that on the one hand, there are certain shortcomings in awareness and ethical upbringing of girls 22-27 years old, on the other hand, this situation may be exaggerated by the presence in this group different kinds of the nervous system dysfunctions.

Conclusion: There is a need for better incorporation of the ethical component in the gynecological consultation of young people with neurological disorders, for the purpose of informing the young people with the help of gynecologist's consultation, for establishing of appropriate reference materials and clinical protocols for the corresponding training of doctors.

Keywords: ethics, medical ethics, relation medic-patient, gynecology, gynecologist, nervous system disfunction

22. MEDICAL STUDENTS' MORAL BEHAVIOR IN THE EARLY YEARS OF EDUCATION

Tabarcea Ana

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Introduction: The formation moral adequate personality of a doctor is a long process, complex and difficult because during its evolution professional individual collides not only with moral values , but also with their opposites. Choosing the medical profession is an extremely important step that requires patience, hard work, strength, love for the profession, to patients and self-sacrifice, dedication to the profession in context with all his being. Personality development of a future specialist can only be done by accumulating theoretical knowledge base, necessary and moral training, but also in terms of values formed which will facilitate interacting between doctor and patient, will contribute to improving the treatment process and will help to and perform the task with dignity and success.

Purpose and Objective: Study of moral behavior and the importance of its application in the early formation of a multilateral high quality specialist in medicine.

Materials and methods: Sociological analyzes, published international reference publications. Was also analyzed the sociological, historical and comparative ethics.

Results: Practicing medicine is perceived not only as a profession, but as an art, vocation, having both a strong social, as well as ethical. Moral conscience, care for humans identify with what we value as a medical vocation inevitably linked to a sense of moral and professional responsibility of the physician, and patient safety, success and satisfaction recorded by a professional. Humanism, impartiality and conscientiousness are just some of the fundamental features that are required to possess a good doctor. All these values and will fully describe the medical act, the spirit of initiative that medical students will implement. Just in terms of such an education future physician can alleviate patients suffering and will integrate values designating the successful medical act.

Conclusion: Moral education of a doctor must include some special criteria as medical worker plays a decisive role in achieving ethical imperatives: first, general onset medical students and not least, of the professional. Doctor's person is regarded as a model from the patient, so it is crucial that both the moral as well as physical behavior to meet certain qualities and values, which are necessary to form still in the early years of education.

Keywords: moral behavior, medical students, values, personality, medical act

PUBLIC HEALTH

1. HEALTH PROBLEMS DUE TO LABOR MIGRATION

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Introduction It is well known that the labor migration influences traditions, customs, lifestyle of people, reached to enormous changes in individual behavior and thinking of people touched by the phenomenon of mobility. As this impact is reflected on their health, proven mostly indirectly and understood by society the present day.

Materials and methods This study was aimed at highlighting, assessing and finding solutions for people who are involved in the migration process. The authors had the objective of analyzing how the phenomenon of labor migration affects the population morbidity, what are the obstacles and solutions to improve the health status of labor migrants. This descriptive study is based on a methodological approach to complex health problems due to labor migration. The 1207 labor migrants were questioned from different areas of the country including the regions of the North, Center and South.

Results The research showed that the labor migration not only affects the health, but also creates preconditions for the appearance new diseases, acute exacerbation of chronic disease. The health of migrants degrades over labor conditions which are offered abroad, reached as the migrants had to pay with their health the remittances which are sent home.

Conclusions The health problems occur due to the migrant labor mobility process, but it can be avoided if migrants would take care of their health, not only when they return home, but also when they works outside of the country.

Keywords: labor migration, health, diseases, mobility process

2. ANTIMICROBIAL RESISTANCE/SENSIBILITY OF MICROORGANISMS MOSTLY INVOLVED IN THE ETIOLOGY OF SEPTIC-PURULENT INFECTIONS

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Introduction: Antimicrobial resistance is one of the major risks for the global health security. This phenomenon is particularly characteristic of septic-purulent infections.

Materials and methods: During 2013 were identified and tested with VITEK 2 Compact system 884 strains of microorganisms with GP-21342 cards for Gram-positive microorganisms and GN-21341 for the gram-negative. Number of tested strains were: *S. aureus*–146, *Enterococcus* spp.– 41, *A. baumannii*–92, *Enterobacter* spp. – 81, *E. coli*–130, *Citrobacter* spp. –15, *Morganella* spp. –7, *Proteus* spp. –76, *P. aeruginosa*–161, *Klebsiella* spp.–108, *Serratia* spp.–10 and other microorganisms–17.

Results: Producing of extended spectrum beta lactamase (ESBL) was 72,2% of the strains *K. pneumoniae*, *E. coli* strains of 37,5% and 23,5% *K. oxytoca*. Resistance to methicillin were 27 strains of *S. aureus* (18.5%), and four strains were producing enzymes responsible for inducible resistance to clindamycin. Resistance to vancomycin showed 7,5% of the strains of *Enterococcus* spp., antibiotic which is one of the few options that may be used in the treatment of infections due to enterococci. Against carbapenems, higher resistance showed strains of *P. aeruginosa*–51,18%, *Proteus* spp.–18,67%, *Serratia* spp.–25%, *Klebsiella* spp.–10,60%, *Enterobacter* spp.–8,82% and *E. coli*–2,70%. *A. baumannii* strains were resistant to carbapenems only one sample, and *Citrobacter* spp. and *Morganella* spp. were susceptible to carbapenems. Against third generation cephalosporins, the resistance of strains of microorganisms often involved in producing septic-purulent infections were much higher. More resistant to cephalosporins have proved to be micro-

organisms of the genus *Klebsiella* spp.– 68.84%, *Proteus* spp.–56.30%, *Enterobacter* spp. –43.45%, *E. coli* - 33.85%.

Conclusion: Studied microorganisms show high resistance to antibiotics, especially to third generation cephalosporins. Dynamic monitoring is necessary in order to preserve one of the latest treatment options of septic-purulent infections.

Keywords: microorganisms, septic-purulent infections, resistance, carbapenems, cephalosporins

3. MANAGEMENT OF CHANGE IN THE OCCUPATIONAL HEALTH SERVICE

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Introduction: Occupational Health Service (OHS) is one of the prior charges of EU politics on employment and social affairs. The basic aim of OHS is to protect the health of workers, to promote the establishment of a healthy and safe work environment and a well-functioning work community. To achieve this goal, occupational health services carry out promotion, preventive and curative activities. Management of change are comprehensive objectives for planning, coordination, monitoring and multidisciplinary control.

Purpose: Literature review and comparative analysis of EU countries in the field concerned.

Materials and methods: Survey anonim developed by the authors. Research of sample was work laboratory for Specialist Day in OHS 2014 year, were processed 2 groups: group I – 35 hygienist physicians and group II - 30 hygienist resident physicians, students in 6-th course.

Results: There is a significant difference between these 2 groups: group I consider that OHS in Republic of Moldova is satisfactory, but group II - unsatisfactory. Hygienist physicians esteem insufficient material and technical base of the OHS, while greenness hygienist resident physicians satisfactory. Hygienist physicians with 25-35 years' work experience mentioned weak and unsatisfactory cooperation with occupational physicians. Note, that only 8.5 units of occupational physicians working in the RM. Also, more than 2/3 of doctors-hygienists from rural districts as well 3/4 of the students had the opinion, that cooperation with primary care physicians is good and high. 60% cases showed weak collaboration with committee medical expertise of vitality of positions deficiency in medical, professional and social rehabilitation. Changes in society, globalization and scientific and technical progress have occurred to the requirements hygienic for workplace and occupational process.

Conclusions: Management of change in OHS is an innovative, with hierarchic strategy and consensual approach. By that explain the durability and expected outcomes from management of change in OHS.

Key words: Occupational Health Service (OHS), management of change

4. ERGONOMIC - OCRA CHECKLIST RISK ASSESSMENT IN THE INDUSTRY CONFECTION

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Introduction: The OCRA method is the reference method chosen in ISO (ISO 11228-3) and CEN (EN 1005-5) standards regarding risk assessment and management of upper limbs repetitive movements and exertions. The method consists of two specific tools (OCRA index and OCRA checklist). In this paper special attention will be devoted to the procedures for the analysis of multiple repetitive tasks. The Occupational Repetitive Actions (OCRA) - is a synthetic index describing risk factors of repetitive actions at work with one figure. The OCRA index quantifies the relationship between the daily numbers of actually performed by the upper limbs in repetitive tasks, and corresponding number of recommend

actions: (total number of technical actions actually performed during the shift) / (total number of recommended technical actions during the shift). OCRA methods have been developed in Italy to analyze worker's exposure to tasks featuring various upper-limb injury risk factors. OCRA checklist is simpler and not so accurate than OCRA index. It can be used in risk evaluation to produce the first "map of risks".

The present study **object** is to evaluate relationships between MSDs diagnosis and results of OCRA assessment. It also intends to analyse the predictive validity of OCRA by confrontation with video analyses results.

Materials and methods: The study was performed on a group of 32 people working in the confection department. They work on two shifts of 8 hours each. We observed the workplace. We completed OCRA checklist; both filmed with the video camera the professional activity of some workers. Evaluation of the final checklist for the work (recovery score + frequency score + force score + posture score) x multiplier for the total duration of repetitive tasks.

Results: Workers (42.0%) that present symptoms during one year were submitted to a clinical examination by an orthopedist to identify musculoskeletal diseases. OCRA checklist was applied in the same workplaces (62.3%) by two skilled ergonomists at the plant. Workplaces with moderate/high scores (n=57) on MSDs risk (OCRA checklist score ≥ 16.5) at elbow, wrist and fingers for means of OCRA predictive validity. The working activity requires the use of moderate force for (3 points on the Borg scale): Using tools, Pressing or handling components, Lifting or handling objects. OCRA checklist results it appears that OCRA has a broader scope due to the integration of four occupational hazards, including vibrations exposure, and provides a higher predictive validity. According to the results, observational risk assessment methods seem to be "useful" tools that should be valid and pointed to workplaces that workers are exposed to MSDs risk factors. Discrepancies in results between MSDs risk assessment methods and clinically diagnosed MSDs cases should be analyzed and reflected that a minimalist approach or even simplistic, should, *prima facie*, to present results with similar levels of agreement. The risk factor "frequency of technical actions" or repetitively is crucial to the development of MSDs that is confirmed in our results (0.89), instead posture had just half of the weighting of OCRA score (0.42). **Conclusions:** All these processes, due to the duration, frequency of execution (hundreds of times per day) and the amplitude of the movements represent risk factors for the musculoskeletal disorders.

Keywords: ergonomics - OCRA index, repetitive action, risk assessment, technical operation

5. EVOLUTIONAL ASPECTS OF DISABILITY APPEARANCE IN REPUBLIC OF MOLDOVA

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Introduction: In 2012 was established that 1 billion people or 15 % from population of the world live with a kind of handicap. 2/3 are from poor countries with transition economy, as Republic of Moldova.

Purpose: Literature review and comparative analysis of EU countries in the field concerned.

Materials and methods: We use math-statistic method, historical and analytical-comparative method. We evaluate the official files from Medical Board for Vitality, annals and other papers.

Results: From 141.4 thousand people with disability in 2002 year, in 2013 rose to 183 thousand people. Also payees of social protection agency are 136 thousand, 510 from 10 thousand of general population. About 1 person from 6 has a grand level of disability (first group of invalidity with 0-20% of working capacity). Persons with handicap in Republic of Moldova are 5.2% from total population of the country, 2.1% of that are children. 61% of them are living in the countryside. About 130.7‰ in 2012 year acquired payee for disability, 3.0‰ from them for professional disease and injury at the workplace, 1.9‰ participated at the Chernobyl accident. Women with disability in 2008 are 2.1%; 473 thousand women and 563 men to 10 thousand people.

Conclusion: Disability is a global public health problem, besides Republic of Moldova. Determining factor is the aging population process, the risk factors from the occupational area and the high level of associated disease (diabetes, cardiovascular disease, cancer and others). The determination of disability service in Republic of Moldova is in the process of reformation, based on the implementation International Classification of Functioning, Disability and Health, also known as ICF.

Key words: disability, occupational disease, injury at the workplace

6. HYGIENIC ASSESSMENT OF LEAD CONTENT IN THE ENVIRONMENTAL MEDIA AND POSSIBILITIES TO REDUCE THE ASSOCIATED RISK ON HUMAN HEALTH

Elena Jardan

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Introduction: Human health and chemical safety are key elements in the socioeconomic development of the country. Research conducted in the past in the Republic of Moldova regarding the environmental pollution with chemicals shows the importance of studying their continuity and to elucidate the impact on human health. Lead is one of the major pollutants of the environment due to its cumulative toxic effects and of which the concentration increased alarmingly recent decades. Lead is considered the pollutant number one, due to large number of poisoning.

Purpose and objectives: Hygienic assessment of lead content in the environmental media in Moldova and developing measures to minimize the negative impacts on human health.

Materials and methods: The project is based on using the methods of laboratory investigation hygienic and instrumental (determination of lead content in soil, atmospheric air, biological substrates), statistical methods.

Results: Lead is used by people for hundreds of years, but no one thought about the possible consequences of lead exposure. In the twentieth century have expanded the scope and quantity of lead production. Most of the lead detected in food, water, soil and dust are of anthropogenic origin, but not natural. The main source of lead in the environment is water, due to use of lead pipes, lead-based paints. The most important mobile sources of lead in ambient air in countries where leaded petrol is used, are vehicles. Sources of lead pollution are emissions from road, rail and sea transport, lead in paints, cosmetics, traditional medicines, lead in construction materials and use of lead acid batteries. After statistical data in Moldova are used annually about 5,000 tons of fuel with additive lead tetraethyl. According to official statistics of the World Health Organization 25 % of the overall population morbidity are due to the influence of chemicals. Human exposure to lead is estimated at 143 000 deaths each year and 0.6 % of the global burden of disease. Lead is a toxic that affects many body systems, including neurological, hematological, immunological, gastrointestinal, cardiovascular and renal systems. Child exposed to lead is estimated to contribute to about 600 000 new cases of children with intellectual disabilities each year. The concentration of lead in blood is an informative biomarkers for exposure assessment of lead on humans. The most susceptible are children of early age, especially in its central nervous system is affected, manifesting itself by reducing intellectual capacity and behavioral disorders. Adverse effects in this group occurs when the lead content in the blood is less than 200 mkg / l

Conclusions: Test results of environmental pollution with lead in the surveillance activity wear only an informational components description. Research conducted in the past in the Republic of Moldova in environmental pollution with chemicals shows the importance of studying their continuity and to elucidate the impact on human health.

Key words: lead, environmental media, human health

7. PECULIARITIES OF ETIOLOGICAL STRUCTURE OF THE SEPTIC-PURULENT INFECTIONS IN THE PATIENTS WITH ORTHOPEDIC TRAUMA HOSPITALS

Spătaru Diana

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Introduction: Septic-purulent nosocomial pathology is the major public health problem. One of the nosocomial infections particularity is the diversity of causative agents, which depend on the profile of the department.

Materials and Methods: In this study was used the transversal retrospective method of analysis. There were isolated 2013 strains of microorganisms from the patients with septic-purulent infections, hospitalized in orthopedics and traumatology departments.

Results: The result of the study found that the etiological structure was varied and included 18 species of microorganisms and predominant Gram-positive (63,2%). From gram-positive microorganisms predominate were *S.aureus*– 62,02%, *S. epidermidis*– 15,02% and *E. faecalis*– 20,2%. Gram-negative microorganisms are isolated in 35,56 %, *P. aeruginosa*– 30,02 %, *E.aerogenes* 24,3 %, *E. coli* - 12.3 %, *Citrobacter*– 17,59 %, *Proteus* – 10,06 % and *Klebsiella* – 5,30%. It confirmed the polyetiological features of septic-purulent infections. At the 43,36% patients were isolated the combination of microorganisms from 2 to 5 strains. In young patients were isolated mainly monocultures, while in the elderly were detected association of 2-5 strains of microorganisms. Also, a decrease of gram-positive strains of microorganisms was found with increasing age of the patients and, conversely, an increase of gram-negative microorganisms.

Conclusion:

Septic-purulent nosocomial infections in trauma patients are characterized by the predominance of gram-positive microorganisms as a causative agents. There were identified a high rate of association of microorganisms isolated in pathological eliminations, and increasing of gram-negative microorganisms disorders at elderly patients.

Keyword: septic-purulent nosocomial infections, the etiologic structure, gram-positive microorganisms, gram-negative microorganisms

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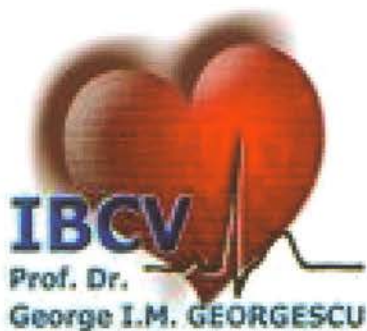
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