ABSTRACT & REFERENCES

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DISORDERS OF THE FAMILY HEALTH IN PARTICIPANTS OF THE BATTLE ACTIVITIES FROM THE POINT OF CONCEPT OF POST-STRESS PSYCHOLOGICAL MALADAPTATION: CLINICAL AND PSYCHOLOGICAL MANIFESTATIONS, MECHANISMS OF FORMATION, PSYCHO-CORRECTION PRINCIPLES

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In order to investigate the phenomenology and mechanisms of development of health deterioration of families of demobilized combatants, and the development of a program for its psychological correction on this basis, during the period from 2015 to 2018, 100 combatants and their wives were thoroughly examined. The research was conducted with the help of socio-demographic, clinical-psychopathological, psychodiagnostic methods and system-structural analysis of sexual health. According to the criteria for the success of marital relationships, the examined families were divided into two groups: the main group consisted of 72 couples with family health deterioration, and the group of comparison included 28 successful couples.

The generalization of the obtained results confirmed the hypothesis formulated by us about the polymodality of the phenomenon of health deterioration of combatants' families, which has at least psychopathological, behavioral, personal, psychosocial, sexual and family dimensions of the problem. In addition, on the basis of the obtained results, two clinical and psychological variants of family health deterioration of combatants were distinguished: destructively-congruent, which was characteristic for 40.3 % of problematic married couples, and traumatically-uncoordinated, found in 59.7 % of the families of the main group.

The psychocorrection program for the family health deterioration of combatants was developed, which takes into account both the general laws of its development, and the meaningful differences in its manifestations, depending on the clinical and psychological variant. The evaluation of effectiveness, carried out through a comparative analysis of the indicators of marital satisfaction and quality of life of individuals of psychocorrection and control groups, has proved their effectiveness in relation to the selected targets of psychocorrective impact.

Keywords: *family health deterioration, participants in military actions, post-stress psychological maladaptation.*

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MASTER CLASS AS ONE OF THE MODERN APPROACHES OF TEACHING OCCUPATIONAL PATHOLOGY TO DOCTORS OF DIFFERENT SPECIALITIES

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The article describes some features of Master Class teaching as a form of training doctors issues of occupational pathology. The purpose of this work is to take advantage of Master Class research to let physicians successfully conduct preventive medical checkups and specify peculiarities of paperwork in case of a suspected occupational disease.

Materials and approaches: documents according to the results of preventive medical checkups (dispensary records, records of those workers who are subject to periodical (preventive) medical checkups); methodological guidance of lectures, teaching aids of the Occupational Diseases Department; normative documents regulating medical checkups of employees working in hazardous and dangerous conditions.

As Master Class, a peer review of the documents was carried out according to the results of medical checkups of certain types of workers. During the preparatory and organizational stage, physicians check the accuracy of execution of documents according to the results of medical checkups. During the second (main) stage, the lecturer shows examples of accurate execution of these documents and reveals the most typical mistakes made by physicians during medical checkups. The lecturer illustrates the fundamentals of normative documents regulating preventive and curative medical care for those employees who work in hazardous and dangerous conditions. During the stage of monitoring, physicians check documents being analyzed during the first stage of Master Class again.

Master Class is determined to enhance the knowledge of doctors of diverse specialties in occupational diseases, receive proposals how to improve health care of employees who work in hazardous and dangerous conditions.

Keywords: *Master Class, occupational pathology, postgraduate medical education, preventive medical check-ups.*

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IIMPLEMENTING THE DISTANCE LEARNING IN THE SYSTEM OF POSTGRADUATE EDUCATION: PROBLEM ISSUES OF MODERNITY

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The article analyzes some aspects of the development of postgraduate education of pharmacy specialists and medicine in Ukraine, emphasized the feasibility of lifelong education, notes the relevance of introducing distance learning into the system of advanced training of pharmacists and doctors. The concept of the development of postgraduate education of pharmacy and medicine specialists in Ukraine in the light of the Resolution of the Cabinet of Ministers of Ukraine No. 302 of March 28, 2018 "On Approval of the Regulation on the System of Continuing Professional Development of Healthcare Professionals" was considered. Some of the difficulties and features of the introduction of distance learning in our country are highlighted and the possibilities of overcoming them by adapting the principles and methods of distance learning to the national characteristics of our state are proposed. The stages of the preliminary preparation of the department for the introduction of distance education are described in detail — the training of teacher's staff, the preparation of the material base, the creation of methodological support, et all.

The article reveals the main achievement of the department staff — practical experience in creating a distance course "Pharmaceutical Technology" for Specialization (Internships) in the specialty "General Pharmacy", outlines the main problems and highlights the features that have arisen during its preparation. According to the results, the algorithm for creating a distance course is highlighted, the main difficulties that arose during its creation are highlighted, the relevance of solving such important issues as: intellectual property protection, the need to adapt teachers' consciousness to modern forms of education, the need to prepare fundamentally new educational material kind of content.

Keywords: *distance learning, postgraduate education, pharmacy and medicine specialists, continuing professional education.*

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THE EFFECTIVENESS OF RESPIRATORY SUPPORT AND N-ACETYLCYSTEINE IN PATIENTS WITH ACUTE RESPIRATORY FAILURE ON THE BACKGROUND OF POLYTRAUMA

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The purpose of the work was a comparative study of the efficacy of ambroxol and N-acetylcysteine (NAC) in patients with lung injury and acute respiratory distress syndrome (ARDS). It surveyed 38 patients. Intensive therapy complied with the principles of treatment for ARDS. Patients in the control group received ambroxol to improve the respiratory function of the lungs. Patients of the main group received NAC. We studied the tension of blood gases, the blood content of carboxylated hemoglobin (HbCO %), central hemodynamics, thoracic fluid content, the indices of static respiratory compliance, inspiratory resistance of the respiratory tract within 5 days of intensive therapy. The NAC therapy significantly accelerated the normalization of the voltage of blood gases, a decrease in the HbCO % content, an improvement in the performance of the heart, a decrease in the accumulation of fluid in the chest. Respiratory support with the creation of constant positive pressure in the airways has contributed to maintaining the size of the respiratory compliance, even in conditions of severe hypoxemia and fluid accumulation in the chest.

Keywords: *chest injury, lung injury, acute respiratory distress syndrome, acute respiratory failure, central hemodynamics, thoracic fluid content, respiratory support, N-acetylcysteine.*

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EFFECT OF DIFFERENTIATED METABOLIC THERAPY ON THE LEVEL OF MARKERS OF SYSTEMIC INFLAMMATION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS AND ARTERIAL HYPERTENSION

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Among patients with arterial hypertension in combination with rheumatoid arthritis, the imbalance of proinflammatory and anti-inflammatory cytokines is considered as a risk factor for the progression of cardiovascular disease.

Is to investigate the markers of systemic inflammation and to evaluate the effectiveness of differentiated metabolic therapy with the inclusion of Meldonium, and L-arginine aspartate on their dynamics in patients with arterial hypertension combined with rheumatoid arthritis.

The patients were determined the levels of interleukin-1β, interleukin-10 and highly sensitive C-reactive protein at the beginning of the study and after twelve weeks of complex treatment.

In subgroups of patients who received additional metabolic therapy, during treatment for three months there was a significantly more pronounced decrease in interleukin-1β, higher interleukin-1β and lower Il-1β/IL-10 ratio ($p < 0.01$). In the subgroup of patients treated with Meldonium, there was a significant more pronounced decrease in interleukin-1β, ratio of IL-1β/IL-10 and HS-CRP in comparison with the indicators of the second and third subgroups ($p < 0.05$).

Keywords: *arterial hypertension, rheumatoid arthritis, interleukins, C-reactive protein.*

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FEATURES OF THE VITAMIN D STATUS OF PREGNANT WOMEN OF INDUSTRIAL CITY

O. V. Grishchenko, T. I. Goman

Since pregnancy is a very important period in women's life, it is important for the normal development of the gestational process to ensure that the body is saturated with vitamins and minerals, among which vitamin D is one of the most important. Vitamin D deficiency can cause complications of pregnancy such as pre-eclampsia, gestational diabetes, premature childbirth.

The problem and causes of insufficiency and deficiency of vitamin D in pregnant women living in a big city are considered. The mechanisms of its action and the classical and «non-classical» effects of regulation of the most important functions of an organism are shown. As a marker of vitamin D levels in blood plasma, the content of 25-hydroxycalciferol (25 (OH) D) is used. This indicator reflects both the formation of vitamin D in the skin under

the influence of ultraviolet radiation and its entry into the body with food of animal and vegetable origin.

The results of their own research, which show that the vast majority of modern pregnant women living in the city, even in non-pregnant women, have vitamin D deficiency. The frequency of diagnosed deficits in pre-pregnancy and re-pregnancy women is shown. It should be noted that the frequency of diagnosis of vitamin D deficiency was higher in pregnant women who have breastfeeding in the history. This suggests that re-pregnant women who have been breast-fed for a long time are in a high-risk group of insufficiency and vitamin D deficiency compared to the first-born pregnant women. The obtained vitamin D levels indicate that the eating behavior of surveyed pregnant women and the qualitative characteristics of products do not fully support a sufficient level of cholecalciferol. Taking into account the importance of vitamin D for normal pregnancy and fetal development, one of the promising directions in preventing gestational complications is the development and implementation of methods for eliminating and preventing vitamin D deficiency in the healthcare system both during the pre-pregnancy preparation and during pregnancy.

Keywords: *pregnant women, vitamin D, diagnosis, gestational period.*

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FORMATION OF THE HEMODYNAMIC RESPONSE IN GOAL-DIRECT INFUSION THERAPY OF HIGH SURGICAL RISK PATIENTS WITH ACUTE ABDOMINAL PATHOLOGY

O. V. Kravets

Infusion therapy is an essential way of compensation volume depletion in patients with acute abdominal disease and affect the outcome.

The purpose is to assess the state of central and peripheral hemodynamics in a goal-direct infusion therapy of high surgical risk patients with acute abdominal pathology.

We examined 35 patients with acute abdominal pathology, who operated on an emergency laparotomy. The parameters of central and peripheral hemodynamics were determined over 10 days of the postoperative period. Method of noninvasive bioelectrical rheography monitor complex «Diamond-M» were identified central hemodynamic parameters: cardiac index, stroke volume, stroke index, total peripheral vascular resistance. Peripheral perfusion index was evaluated according to the data of the «+ BIOMED» apparatus.

The results: determined recovery to normal heart stroke volume, cardiac index, heart rate from the first day after surgery. At the same time, normal values of tissue perfusion were noted. These figures remained until the end of the observation.

Conclusions: A goal-direct infusion therapy of high surgical risk patients with acute abdominal pathology allows volumetric depletion to be corrected by preserving the relatively hypodynamic type of circulation against the background of tachycardia, vasospasm and supranormal clinical hemodynamic parameters for the first 6-s hours of treatment, maintaining the normodynamic type of circulation from 1-t to 3-rd day against the background of high peripheral resistance, the formation of a relatively hypodynamic type of circulation at 5-th to the 7-th day on the background conserved vasospasm, preservation of tissue perfusion from the 1-st to 10-th postoperative day.

Keywords: *Urgent laparotomy, a high surgical risk, goal-direct infusion therapy, central hemodynamics.*

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THE ROLE OF GRELIN IN THE FORMATION OF THE COMORBIDE FLOW OF GASTROESOPHAGEAL REFLUX DISEASE WITH TYPE 2 DIABETES IN YOUNG PEOPLE

O. A. Oparin, A. G. Oparin, A. A. Kudriavtsev

To study the role of ghrelin in the mechanisms of formation of comorbid GERD with type 2 diabetes in young people, taking into account oxidative stress.

We conducted a study of four groups of patients suffering from GERD with type 2 diabetes, mild and moderate severity and isolated GERD. We found that in patients suffering from GERD with type 2 diabetes, normalization of glycaemia levels was observed from the first days of therapy. In patients of all groups, the intensity of clinical manifestations of GERD — heartburn and the intensity of dyspeptic manifestations were decreased.

In patients with GERD with concomitant type 2 diabetes there was a marked change in the level of ghrelin. A correlation was established between the degree of severity, the characteristics of the symptoms, the change in the levels of ghrelin, superoxide dismutase and TBC of the blood. The inclusion of actovegin in the scheme of treatment of patients with GERD and diabetes contributes to a significant reduction in the exacerbation period of both diabetes and GERD, while simultaneously normalizing the level of ghrelin, oxidative stress.

Keywords: *ghrelin, actovegin, gastroesophageal reflux disease, type 2 diabetes, oxidative stress, antioxidant protection.*

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INTENSITY OF TISSUE RESPIRATION AND OXIDATIVE PHOSPHORYLATION IN MITOCHONDRIA OF HEPATOCYTES OF RAT UNDER THE INFLUENCE OF SODIUM FLUORIDE

I. Yu. Bagmut, I. L. Kolysnik, A. V. Titkova

Mature rats of the Wistar population (N = 24), who were daily injected intravenously with aqueous solutions of sodium fluoride at a rate of 20 mg / kg animal weight, taking into account 200 mg / kg LD50, the duration of low-dose subtoxic infections – for 1.5 months, were studied pathophysiology mechanisms intoxication. Metabolic state of mitochondria after determination of the rate of oxygen consumption in the non-receptor medium (V4), the rate of oxygen consumption in the presence of the acceptor (V3), the rate of oxygen consumption after exhaustion, add th ADP in the presence of the 2,4-dinitrophenol (2,4-DNF disconnector)) (V4P) was significantly reduced. The calculation of the ratio of ADP / O2, similar in value to the coefficient of phosphorylation of P / O, which characterizes the conjugation of oxidation and phosphorylation processes in the respiratory chain is also clearly and significantly reduced; respiratory factor (DC) – the ratio of the rate of oxygen absorption in the state V3k absorption rate in the state V4 (before the introduction of ADP) and the activity of ATP-hydrolases reactions as the ratio V4 / V4P, characterizing the rate of regeneration of ADP after its phosphorylation. Measurement of ATPase activity (Ca2 + - and Mg2 + - dependent ATPase), which was calculated in μmol of phosphate / 1 mg of protein per hour, showed a decrease. Sodium fluoride at a subtoxic dose of 20 mg / kg animal weight (1/10 LD50) inhibits and separates the processes of tissue respiration and oxidative phosphorylation, which reveals the mechanism of fluoride (small doses) of experimental chronic intoxication.

Keywords: *sodium fluoride, mitochondria, hepatocytes, Wistar rats.*

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INSOMNIA AND GASTROESOPHAGEAL REFLUX DISEASE: COURSE FEATURES, DEVELOPMENT MECHANISMS AND WAYS OF CORRECTION

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This paper addresses insomnia as one of relevant comorbid pathologies in gastroesophageal reflux disease (GERD). The main features of insomnia in GERD are: sleep disorders increase with age and affect mostly women; patients have mild and moderate insomnia; according to the PSQI, significant differences were found in severe daytime sleepiness, significant decline of physical component of life quality, GERD symptoms were more explicit in patients with non-erosive reflux disease. The main factors of GERD-caused sleep disorders are reflux, night heartburn, anxiety and depression. Psychosomatic plays an important part. The ways of insomnia correction in GERD are additional intake of proton pump inhibitors in the evening, ramelteon and melatonin. There is a bi-directional relationship between sleep disturbance and GERD symptoms, depression and insomnia.

Keywords: *gastroesophageal reflux disease, insomnia, proton pump inhibitor, ramelteon, melatonin.*

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MODERN OPPORTUNITIES FOR THE DIAGNOSTICS OF CHRONIC ENDOMETRITIS

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Chronic endometritis (CHE) is one of the most important nosological forms in modern gynecology due to reproductive function disorders (miscarriage, infertility) and the incidence of the disease. Despite significant progress in the study of CHE acquired practical experience, it is especially difficult to diagnose. The lack of a single specific diagnostic criterion, the diversity of views on the possibilities and informational value of numerous methods cause diagnostic errors and the resultinglack of effectiveness of treatment. Therefore, we considered it expedient to summarize the current views on the diagnosis of CHE in the presented literature review.

Keywords: *chronic endometritis, diagnostic methods, diagnosis verification.*

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PECULIARITIES OF CARBOHYDRATE AND LIPID CHANGES IN THE CASE OF DIFFERENT VARIANTS OF THE UNWANTED OVERCOMING OF HEART DEFECTS IN PATIENTS WITH CORONARY HEART DISEASE IN COMBINATION WITH TYPE 2 DIABETES

E. Yu. Lipakova

Nowadays it`s very promising to find out simple measurements of early signs of CHF progression , which allow to separate patients with high risk of unfavorable outcome of IHD and DM type II, and do this with high sensitivity and specificity. This will allow to provide appropriate treatment in time, decrease complications rate, and also help with proper medical and social services planning. The objective of the study: investigate changes in carbohydrate and lipid panel in different types of unfavorable chronic heart failure outcomes among patients that have ischemic heart disease and diabetes mellitus type II

After conventional in-hospital treatment examination of 34 males that have ischemic CHF with IHD and DM type II. Patients were divided in three groups depending on CHF progression degree during observational period: I (N = 7) — exitus letalis, II (N = 13) — with LV EF decreased, III (N = 14) — with signs of dyastolic disfunction.

Complaints, cardiologycal anamnesis, physical examination data, serum glycated hemoglobin (HbA1c), serum glucose level, insulin plasma level were assessed, homeostatic model assessment index (HOMA-ir). Levels of total cholesterol (TC), high density lipoproteins (HDL), low density lipoproteins (LDL) and triglycerides (TG) was measured, also we calculate aterogenity index (AI).

In order to identify differences between independent samples was used Mann-Whitney U-criteria. Frequency of signs occurrence in groups was compared by χ2 criteria.

Observational period was 12 months. All patients recieved conventional treatment. In group I, unfavorable outcome was strongly associated with age, longer history of IHD and DM type II, impaired physical exertion tolerance, high level of arterial hypertension. Last one is proven potential cause of CHF.

Outcome of CHF among patients with IHD and DM type II with preserved LV EF in case of death is strongly associated with duration of IHD and DM type II, higher arterial hypertension level.

Keywords: *progressive heart failure, diabetes mellitus type II, carbohydrate and lipid panel.*

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