ABSTRACT&REFERENCES

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FEATURES OF STRUCTURAL AND FUNCTIONAL HEART REMODELING IN PATIENTS WITH ARTERIAL HYPERTENSION AND THYROTOXICOSIS DEPENDING ON THE DEGREE OF ITS COMPENSATION

p. 3-9

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The aim*: to study the peculiarities of structural and functional remodeling of the heart in arterial hypertension patients depending on the degree of thyrotoxicosis compensation.*

Materials and methods. *The study included 80 patients with AH, 50 patients per AH with concomitant TT (mean age 52.6±12.7 years, mean duration of AG – 6.5±4.0 years, duration of TT 3.9±2.5), depending on the degree of compensation for TT the patients were divided into 2 groups (group 1 – compensated TT, group 2 – decompensated TT). The control group consisted of 30 patients from AH (mean age – 56.2±7.6 years, mean duration of AG – 8.8±4.4 years), who had excluded thyroid dysfunction during the examination.*

Results and discussion*. According to the results of echocardiography, types of myocardial hypertrophy of the left ventricle were studied. Correlation and regression analyses were performed concerning the influence of thyroid hormone on the systolic blood pressure level according to the data of the outpatient blood pressure monitor.*

Conclusions. *It was proved that the absence of thyrotoxicosis compensation in patients with arterial hypertension is accompanied by an increased level of systolic blood pressure, both during the whole day and during the day and night periods as compared to the control group and the group of patients with compensated thyrotoxicosis. Feedback between the systolic blood pressure level and the thyroid hormone has been proved. Based on correlation and regression analyses, it was established that heart remodeling in patients with arterial hypertension and thyrotoxicosis depends both on the level of systolic blood pressure (according to outpatient blood pressure monitoring) and the level of thyroid hormone*

Keywords*: arterial hypertension, thyrotoxicosis, heart remodelling, myocardial hypertrophy, prognosis*

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CLINICAL AND LABORATORY PORTRAITS OF PATIENTS WITH TUBERCULOSIS AND ALCOHOL CONSUMPTION

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The aim *was to study the clinical and laboratory data of patients with firstly diagnosed pulmonary tuberculosis with different levels of alcohol consumption.*

Materials and methods. *The study included 102 patients with firstly diagnosed pulmonary tuberculosis and preserved sensitivity to anti-TB drugs with alcohol consume. The activity of gamma-glutamyltranspeptidase was determined by the kinetic method. C-reactive protein levels were determined by latex agglutination. To analyse the parameters of the quality of life the SF-36 questionnaire was used. Assessment of the alcohol consumption level was carried out using the Alcohol Use Disorders Identification Test. The obtained data were processed using the Statistica software.*

The results. *According to the results of the AUDIT questionnaire, patients were divided into three groups. Group 1 – persons who scored 0–7 points, group 2 – 8–15 points, group 3 – 16 points or more. The quality of life in the first two groups were at a fairly high level with a predominance of the physical component of health. In the third group, the average indicators for both components were significantly lower than the first two groups. Group 3 patients were more socially maladaptive. In the group of alcohol-abusing patients, pathological process predominant affecting more than one lobe of the lungs with signs of destructive processes of the lung tissue. In 82.1 % of patients in group 3 mycobacterium tuberculosis was detected in sputum already at the stage of microscopic examination. In tuberculosis patients with increasing of alcohol consumption, there was an increase the blood levels of leukocytes, CRP and ESR, manifestations of anemia and a decrease in the activity of cellular immunity due to a decrease of lymphocytes degree. Maximum disturbances occurred in group 3. Indicators of the functional state of the liver, except for ALT, in group 3 were significantly higher than in group 1.*

Conclusions. *Patients with tuberculosis who consume alcohol, has a decrease in social adaptation, quality of life, the more clearly intoxication syndrome, the prevalence of spreading forms of tuberculosis with massive bacterial excretion, as well as impaired liver function*

Keywords: *tuberculosis, alcohol, consumption, abuse, quality of life, clinical data, laboratory data*

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CARDIOVASCULAR COMPLICATIONS IN PATIENTS WITH ACUTE ISCHEMIA OF THE LIMBS IN THE EARLY PERIOD OF ISCHEMIC STROKE

p. 15-18

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Aim. *To define risks and complications for patients with the sharp ischemia of lower extremities in the sharp period of stroke after reconstructive surgical treatment for the decline of amount of amputations and sharp violations of cerebral circulation of blood postoperative period.*

Materials and methods. *In the period 2015–2019 based on the Department of Acute Diseases of Vessels of the State Institution «ICUS by. VT Zaitsev NAMNU »we operated 31 patients for acute ischemia of the lower extremities during the period of acute ischemic stroke (namely, within 3–4 weeks after the neurological manifestations). The mean age of the patients was 72.9± ±1.65 years. Among them are 17 women and 14 men. The diagnosis of acute ischemia of the lower extremities was established in 19 patients, the upper – in 12 patients.*

Results. *All patients (31) were operated; the main blood flow was restored. In 28 cases of patients were performed embolectomy, in 3 cases – bypass surgery.*

Conclusions. *Ultrasound examination of the lower extremities should be performed for patients with acute stroke ischemia with paresis to verify acute lower limb ischemia, which allows timely diagnosis of ischemia and reduce the number of amputations in patients with acute lower limb ischemia I–II degree to 0 %, and the risk of stroke to 3.2 %*

Keywords: *sharp ischemia of lower limbs, sharp violation of cerebral circulation of blood, thrombectomy, amputation*

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EFFICIENCY ANALYSIS OF ULTRASOUND DIAGNOSIS OF ACUTE APPENDICITIS DURING PREGNANCY

p. 18-23

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The aim of the study *was to identify ultrasound signs of various forms of the acute appendicitis and to study the efficiency of the ultrasound method in the diagnosis of acute appendicitis in pregnant women.*

Materials and methods. *73 pregnant women (group I) and 43 non-pregnant women (group II) were examined with suspicion of acute appendicitis. The age of patients ranged from 18 to 40 years, on average – 25.7±0.5 years. Gestational age was from 4–5 to 35–36 weeks. The informational content of sonography was studied by following criteria: sensitivity, specificity, accuracy and efficiency.*

Results and discussion*. An analysis of the results of informational content showed that the diagnostic significance of ultrasound by the third trimester of gestation is decreased which is probably due to the increased size of the uterus and the appearance of acoustic difficulties. Sensitivity, accuracy and efficiency were higher in the first trimester in contrast with second and third trimesters. In group II, higher values of informative indices were noted than in women of group I. There is an increase: sensitivity by 27.3 %, accuracy by 25.2 % and diagnostic efficiency by 14.7 %.*

Conclusions. *Ultrasound diagnosis of acute appendicitis during pregnancy especially at the end of II and III trimesters is a definite problem points to the advantages of an integrated approach to the diagnosis of acute appendicitis during pregnancy comparing the clinical manifestations of the disease with the results of diagnostic research methods*

Keywords: *pregnancy, acute appendicitis, ultrasound diagnostics*

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LEVELS OF SPECIFIC IgE TO AUTO-STRAINS OF S.AUREUS ISOLATED FROM LOCUS MORBI PATIENTS WITH ALLERGODERMATOSIS

p. 23-28

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The aim*: to determine the levels of specific IgE for S. aureus autostrains isolated from locus morbi with allergic dermatoses.*

Research methods*: the study included 81 patients who received medical care in the Department of Dermatology, State Institution "Institute of Dermatology on Venereology of the National Academy of Medical Sciences of Ukraine" in 2016-2019. The patients underwent clinical and laboratory examination, which included analysis of complaints and medical history data, assessment of the severity of the disease according to the SCORAD and EASI scales, and bacteriological and immunological studies. Examination of patients was carried out during an exacerbation of the disease.*

Results of the study*: a correlation was established between the indicators of specific humoral immunity and the clinical course of allergic dermatoses. It was proved that in patients suffering from AD with severe and moderate disease with clinically significant SCORAD indices, IgE reactivity to CCAg auto Staph was significantly higher compared to specific IgE to CCAg reference Staph: 40,5±5,4 and 22,2±3,1 (P <0,01) and 14,9±1,02 and 11,4±1,07 (p<0,01), respectively. When summarizing the results obtained in the study of the blood sera of patients with severe and moderate IE with significant EASI indices, it was shown that the levels of anti-staphylococcal IgE to CCAg auto Staph were significantly higher when compared with serum IgE to CCAg reference Staph: 15,8±1,51 and 11, 7±0,96 (p<0,01) and 8,4±0,48 and 6,9±0,39 (P <0.02), respectively.*

Conclusions: *given that the determination of specific and total IgE in blood serum blood pressure is included in the clinical protocol for the provision of specialized and highly specialized medical care, and allergen-specific therapy is considered as a promising treatment method, the determination of specific IgE before CCAg auto Staph can provide a personalized approach for diagnosis and treatment allergic dermatoses, weighed down by staphylococcal abnormal colonization of the skin*

Keywords: *allergic dermatoses, clinical course, specific IgE*

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MORPHOMETRIC AND IMMUNOHISTOCHEMICAL FEATURES OF TTF-1 POSITIVE LUNG TUMORS: IMPROVEMENT OF APPROACHES TO THE DIAGNOSIS OF UNKNOWN PRIMARY SITES METASTASES

p. 29-34

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Verification of lung tumors in the practical activity of a pathomorphologist reached a completely different level due to the use of additional highly sensitive diagnostic methods (immunohistochemical (IHC) and cytogenetic studies). Thyroid transcription factor 1 (TTF-1) plays a key role in lung morphogenesis and is expressed in about 90 % of pulmonary small cell carcinomas. The positivity of TTF-1 in pulmonary and extrapulmonary neuroendocrine tumors is actively debated in the literature, therefore, the results of IHC on TTF-1 in metastases from an unknown source should be interpreted carefully and constantly improve differential diagnostic algorithms, expanding IHC panels with organ-specific markers, and focus on additional morphometric indicators research of nuclei of tumor cells.

***The aim of the work** is to investigate the complex of morphological, morphometric, and IHC characteristics of TTF-1 positive lung tumors to improve the diagnostic algorithms for metastases from an unknown primary source.*

***Materials and methods.** A retrospective analysis of histological, morphometric and IHC characteristics of the biopsy material TTF-1 of positive lung carcinomas from 36 patients (10 women and 26 men) aged 29 to 81 years (mean 58.03±10.83 years) for the period 2015–2018, taken from the archive of the morphological department of the medical-diagnostic center of LLC "Pharmacies of the Medical Academy" (Ukraine, Dnipro).*

***Results.** In the diagnosis of carcinomas of unknown primary localization with suspected lung origin, it is necessary to take into account morphological, morphometric and IHC features together, which is associated with the similarity of metastases of squamous cell carcinomas of the head and neck, mucinous adenocarcinomas of the gastrointestinal tract and neuroendocrine carcinomas from Merkel cells corresponding to the histological forms lung tumors, as well as insufficient sensitivity of the marker TTF-1.*

***Conclusions.** Use of the minimum primary (Cytokeratin, Pan AE1/AE3 (+) / Vimentin (–/+)/CD45 (–)/S100 (–/+)) and secondary (Ck7+, Ck20–, TTF-1+) IHC panels will prove that the phenotype of carcinoma of unknown primary site corresponds to the form of disseminated lung carcinoma, and additional markers Ck HMW, p63, Chromogranin A, Synaptofisin and / or CD56 together with morphometric indices of the nuclei will determine the histological form of lung carcinoma with justification for the use of appropriate therapy*

***Keywords:** TTF-1, CK7, Ki-67, lung carcinomas, ImageJ*

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SOME ASPECTS OF ENISAMIUM IODIDE NASAL SPRAY SAFETY: PRE-CLINICAL STUDY RESULTS

p. 35-40

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The aim. *To substantiate the safety using of the new nasal spray with Enisamium Iodide via study results of acute local drug-induced irritant action of the test object single-dose to eyes and nasal cavity mucosa.*

Material and methods. *Enisamium Iodide 10 mg/mL (nasal spray) was the test object. The reference drug was 0.9 % saline. Flemish Giant rabbits were used to induce the experiment (2 groups, 9 rabbits in each group). All study objects were administered in single-dose into the eye conjunctival sacs (0.01 mL) and nasal passages (0.1 mL) by instillation. The eye examination we performed in different time observation point (through 1, 24, 48 and 72 h after drug instillation). Nasal endoscopy was used for control of nasal cavity in all stages of study (15 minutes before, 1-hour and 24 hours after drug instillation) under general anesthesia. The scales of the assessment were used to the result objectivity.*

Results. *The total score was 0 points in all groups at all-time points according to the relevant scale and the scale of the assessment of rabbit nasal cavity mucosa by nasal endoscopy results. This corresponds to the condition of a healthy eye and healthy nasal mucosa.*

Conclusions. *Enisamium Iodide 10 mg/mL (nasal spray) in the single-dose instillation into the rabbit eye conjunctival sacs and rabbit nasal passages did not show*

local drug-induced irritant action on the eye conjunctiva and nasal cavity mucosa in the experimental animals. Nasal endoscopy could be used as an informative visual method in preclinical studies.

Keywords: *acute local drug-induced irritant action, Enisamium Iodide (nasal spray), nasal endoscopy single-dose instillation, relevant scale*

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THE LEVEL OF FETAL ATTACHMENT IN WOMEN WITH THE THREAT OF PRETERM BIRTH IN THE THIRD TRIMESTER OF PREGNANCY AND THE PSYCHOMOTOR DEVELOPMENT OF THE FIRST YEAR OF LIFE CONSIDERING MOTHER-CHILD INTERACTION

p. 40-44

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The aim of the research *is to study the level of attachment to the fetus of women with the threat of premature birth in the third trimester of pregnancy and psychomotor development of the baby in the first year of life.*
Materials and methods. *The study included 150 pregnant women in the third trimester (23–37 weeks), and their men. Of these, the main group consisted of 120 women with the risk of preterm birth in the last trimester of pregnancy (MG). The comparison group consisted of 30 women with physiological pregnancy (CG).*
Results and discussion. *Women with MG were found to have a maternal fetal attachment level of 71.0±1.0 (attachment disorder) and women with a CG of 51.0±2.0 (suffi-*

cient attachment level). Assessment of the psychomotor development of the child during the first year of life showed a tendency to lag its indicators in children of mothers from MG (after the second examination of MTG compared with the infants of women with CG and MGK during all periods of observation ($p<0.05$). Such a difference in indicators of psychomotor development was observed at the third survey: the level of development of children of mothers of CG was significantly higher than in women with MG. In the fourth survey, children of MTG mothers (29.0±0.2) showed better psychomotor development rates than infants of MCT women (27.5±0.3), but lower than those of CG (29.4±0.1). Subsequently, the level of psychomotor development of children with CG and MTG was almost equal to that of children of MCG (28.1±0.4), which were lower than in other groups. When reaching the age of one year, the children of MTG mothers showed the best level of psychomotor development (29.2±0.3), almost the same results were observed in children with CG (29.1±0.3), and indicators of MCG children were lower (28.5±0.2).

Conclusions. *Among the negative factors that provoke the formation of dyadic interaction disorders, psychological unpreparedness for motherhood and a low level of attachment to the fetus of women with the threat of premature birth during the third trimester of pregnancy are leading*

Keywords: *threat of premature birth, the mother's level of attachment to the fetus, psychomotor development of the baby*

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ANXIETY AND DEPRESSION IN RELATIVES OF PATIENTS WITH CANCER

p. 45-52

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Life-threatening diseases to the family of cancer patient are psychotraumatic situation and present a difficult challenge.

The aim *of the study was to evaluate the psychopathological symptoms, namely the manifestations of anxiety and depression in relatives of cancer patients at different stages of the disease and depending on the level of adaptation of the family system.*

Contingent and research methods*. The study involved 288 families with a cancer patient, with women in 174 families, and men in 144 ones. At the stage of pri-*

mary contact with cancer, there were 78 families with women and 51 families with men, and 96 and 63 families, respectively, after the recurrence of the disease. Among the interviewed families, 55 families were classified as "adapted", 127 were "borderline", 106 were "disadapted". HADS was used to assess the psychopathological symptoms of anxiety and depression.

Results. *The psycho-emotional state of relatives cancer patients was determined by the combination of the influence of a number of factors, which included the stage of the disease, the level of family adaptation, gender component. The increase in psychopathological symptoms, both depressive and anxious, led to the continuation of the disease as a result of the growing needs of the patient and the need for psychosocial support. Violation of family adaptation correlated with the severity of psychopathological manifestations. The psycho-emotional state of women was dominated by the anxiety state, while the men had relatively higher depressive manifestations.*

Conclusions*. Psychocorrection of emotional state of cancer patient's relatives and stabilization of the family system are important components of medical-psychological help in oncology practice*

Keywords*: medical-psychological help, psychopathological symptoms, anxiety, depression, oncology, psycho-oncology, family cancer patient*

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FEATURES OF COGNITIVE DISORDERS IN PATIENTS WITH PRIMARY EPISODES OF BIPOLAR AFFECTIVE DISORDER

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The aim *of the work was to study the features of cognitive disorders in the primary episode of bipolar affective disorder, taking into account the gender factor and clinical variant.*

Materials and methods. *153 patients with primary episode of bipolar affective disorder: with prevalence of depressive symptomatology (44 men and 75 women), with prevalence of manic symptoms (15 men and 8 women) and with simultaneous presence of depressive and manic symptomatology or with rapid or severe manic symptoms and 5 women) were examined using the Stroop test.*

Results and discussion. *In patients with the depressed primary episode variant, a general slowdown in the performance of all four subtests of the Stroop test was detected: reading time of the names of colors printed in black font (TNFb) in all patients 63.7±8.1 sec., in men 65.0±9.6 sec., in women 63.0±7.0 sec.; names of colors (NC) were respectively 96.6±9.2 sec, 96.5±9.1 sec and 96.6±9.3; reading time of color names where the font color is different from the word value (TNCd) – respectively 153.5±20.3 sec., 153.8±23.3 sec., 153.3±18.6 sec.; name of the word color where the font color is different from the word value (NCWd) – 62.6±7.9 sec., 63.8±9.3 sec. and 61.9±6.9 sec. In patients with a manic variant, the time to perform the Strup test is the smallest of all groups: TNFb – 44.3±4.0 sec., 44.5±4.1 sec. and 43.8±4.1 sec.; NC – 62.7±4.9 sec., 61.7±5.5 sec. and 64.6±3.2 sec.; TNCd – 116.2±9.5 sec., 118.0±10.5 sec. and 112.9±6.4 sec.; NCWd – 43.3±4.0 sec., 43.5±4.1 sec. and 42.8±4.1 sec, respectively. In patients with mixed variant indicators occupy an intermediate position: TNFb – 59,8±16,1 sec., 57,3±14,6 sec. and 62.8±19.0 sec.; NC – 79.1±10.1 sec., 76.5±10.3 sec. and 82.2±10.0 sec.; TNCd – 124.3±22.5 sec., 120.7±18.9 sec. and 128.6±27.7 sec.; NCWd – 58.5± ±15.7 sec., 56.2±14.3 sec. and 61.4±18.5 sec. in accordance. Gender differences in Stroop test performance are not significant.*

Conclusions. *The primary episode of BAD is characterized by the presence of cognitive impairment, the structure and expressiveness of which is determined by the clinical variant. In the depressive variant revealed the greatest overall slowdown in the execution of the Stroop test with a significant number of errors, with manic - deterioration of attention, behavioral inhibition and maximal impulse control when mixed – a marked slowdown in the performance of the Stroop test with a significant number of errors. Gender differences in cognitive impairment are insignificant*

Keywords: *bipolar affective disorder, primary episode, cognitive disorders*

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