

ABSTRACT&REFERENCES

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INDIVIDUAL-PSYCHOLOGICAL PREDICTORS OF FORMATION OF DYSADAPTATION STATES IN DOCTORS-INTERNS

p. 4–6

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Aim of research. *The study of individual-psychological predictors of dysadaptation states formation of doctors-interns for elaborating the system of their diagnostics, correction and psychoprophylaxis.*

Materials and methods of research. *For attaining the set aim, the complex examination of 213 doctors-interns of both genders of 22–25 years old (mean age 23±2 years) from the Kharkiv national medical university was realized in 2012–2016 with observing principles of bioethics and medical deontology.*

Methods of research: clinical-anamnestic, psychodiagnostic, statistical.

Results: *It was established, that 65,7 % of examined doctors-interns (55,7 % of men and 68,6 % of women) demonstrated dysadaptation states. The main role in dysadaptation states formation in doctors-interns is played by the following groups of factors: biological – chronic somatic pathology, organic pathology, bad habits, and psychosocial – discontent with labor conditions, deficit of positive emotions, imperfectness of mechanism of psychological defense, conflicts in the medical environment.*

It was established, that manifestations of dysadaptive states in doctors-interns are the feeling of internal strain with the impossibility to relax, anxious and depressive manifestations, decrease of the intellectual activity productivity.

Three levels of dysadaptation of a family doctor to the professional activity were separated.

Conclusions: *The formation of disorders of doctors-interns' adaptation to the professional activity is conditioned by many factors, biological, social and psychological ones, presented in the indissoluble complex in it. This fact determines the specificity of pathogenesis and syndrome genesis of dysadaptive states.*

The high, middle and low level of family doctors' dysadaptation to the professional activity were described

Keywords: *dysadaptation states, professional activity, doctors-interns, biological and social factors, mechanisms of formation*

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CLINICAL AND PSYCHOPATHOLOGICAL FEATURES OF FORMATION AND COURSE OF DEPRESSIVE DISORDERS AND SUICIDAL BEHAVIOR IN CANCER PATIENTS

p. 7–10

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Aim of research. *The study of clinical and psychopathological features of formation and clinical course of depressive disorders and suicidal behavior in cancer patients.*

Materials and methods of research. *For attaining the set aim, the complex examination of 154 patients of both genders with a cancer pathology of I and II degree and diagnosed depressive*

disorders was realized, with observing principles of bioethics and medical deontology. The main group included 103 patients with suicidal behavior signs, the control one - 51 men without suicidal behavior signs.

Methods of research: clinical-anamnestic, psychodiagnostic, statistical.

Results. There were described the features of the clinical picture of depressive disorders in cancer patients at adaptation disorders, such as depressive reaction, moderate or heavy depressive episode, organic depressive disorder.

It was determined, that the true suicidal behavior prevailed in all patients (53,2 % of patients with depressive reaction, 56,5 % of patients with depressive episode, 51,2 % with organic depressive disorder), affective variant of suicidal disorder was observed in 38,1 %, 40,1 % and 44,1 % of patients, respectively; demonstrative-chantage suicidal behavior was observed in 8,7 % of patients with depressive reaction, 3,4 % of patients with depressive episode, 4,7 % – with organic depressive disorder.

Patients from the main group demonstrated clinical manifestations of anxiety and depression by the hospital scale, high anxiety and depression by Hamilton scale, great depressive episode by Montgomery-Asberg scale, patients from the control group were characterized by clinical manifestations of anxiety and sub-clinical depression by the hospital scale, moderately expressed anxiety and depression by Hamilton scale, moderate depressive episode by Montgomery-Asberg scale.

It was established, that the high level of suicidal risk and low level of consciousness of death in cancer patients with depressive disorders is a precondition of the suicidal behavior formation.

Conclusions.

1. A malignant neoplasm it is a psychotraumatic factor for a patient and leads to the development of depressive disorders and suicidal behavior.

2. The clinical picture of depressive disorders in patients with a cancer pathology is characterized by the predomination of mood inhibition, effect of sorrow and anxiety, immersion into the feeling of an acute grief because of a cancer diagnosis, with narrowing of cognitive functions and predomination of the content of a psychic trauma in consciousness.

3. The main role in the formation of suicidal behavior of cancer patients is played by high indices of clinical scales of anxiety and depression, combined with the low level of death consciousness, burdened suicidal anamnesis

Keywords: suicidal behavior, cancer patients, depressive reaction, depressive episode, organic depressive disorder

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FACTORS ASSOCIATED WITH LONG-TERM PROGNOSIS IN PATIENTS WITH MYOCARDIAL INFARCTION OF THE RIGHT VENTRICLE, EVALUATED BY THE KAPLANE-MEYER METHOD

p. 10–15

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Aim of research. To determine the influence of myocardium infarction (MI) of the right ventricle (RV) on the development of cardio-vascular (CV) events at the long-term observation and to establish the role of factors, associated with the unfavorable prognosis of patients with myocardium infarction of the right ventricle. **Materials and methods.** There were examined 309 patients with Q-MI of the left ventricle (LV), age 65,5±4,42 years old. Patients were divided in 3 groups: 1 group – 155 patients with MI RV

on the background of Q-MI of the back wall of the LV, 2 group – 53 patients with MI RV on the background of Q-MI of the circular localization, 3 group – 101 patients with Q-MI of the back wall of LV. The observation period was 30,6±4,5 months. The end points were considered as: unstable angina (UA), repeated MI, acute disorders of the cerebral blood circulation (ADCB), hospitalization because of heart failure (HF) decompensation and CV-death. The statistical researches included the method of Kaplan-Meier and χ^2 -Pearson test.

Results. After 30,6 months of observation the frequency of CV-complications was reliably higher in both groups of patients with MI RV ($p=0,0039$; $p=0,00012$) comparing with the third group. There was no any essential difference in the frequency of end points between 1 and 2 group with MI RV ($p=0,053$). The planned revascularization is connected with the increase of the life quality of patients after MI RV after the reliable influence of CV-death index. In 30,6 months of rehabilitation men and women in both groups with MI RV had no essential difference in the frequency of repeated MI, ADCB, HF and HF-hospitalizations, but the index of CV-death was reliably higher among female persons ($p<0,05$).

Conclusion. The presence of MI RV in patients with Q-MI LV is connected with the higher frequency of CV-events during 30,6 months of observation. MI RV in women is associated with the essential increase of the risk of CV-mortality during 30,6 months of observation. The delayed revascularization is associated with the decrease of the risk of CV-events development, without influencing CV-death index

Keywords: prognosis, myocardium infarction of the right ventricle, delayed revascularization, gender factor, Kaplan-Meier's method

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STUDY OF FIBROSIS FACTORS IN PATIENTS WITH FIRSTLY DIAGNOSED MULTIDRUG-RESISTANT PULMONARY TUBERCULOSIS

p. 16–21

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Aim. To study the levels of tissue factors of fibrosis and markers of destruction of the pulmonary tissue in patients with firstly diagnosed multidrug-resistant pulmonary tuberculosis.

Materials and methods. There were examined 48 patients with firstly diagnosed multidrug-resistant pulmonary tuberculosis, divided in groups depending on treatment results, with studied levels of general oxyproline, free and protein-bound oxyproline and also aldosterone, matrix metalloproteinase-9 and tissue inhibitor of metalloproteinase-1 at the beginning of the treatment. Pearson's χ^2 and Fisher methods, Kruskal-Wallis criteria, Spearman methods were used.

Results. The group of patients, who finished their treatment successfully, demonstrated the mean values of oxyproline and

MP-9, the highest levels of aldosterone and TIMP-1 compared with other groups of patients. Patients, who died before the finish of the main course of chemotherapy, had demonstrated the highest levels of bound oxyproline and MP-9, and also a bit lower levels of free oxyproline and TIMP-1 compared with the group of effectively treated ones. The least levels of all studied parameters were observed in the group of unsuccessfully treated patients.

Conclusion. The processes of decay of the pulmonary tissue prevailed over the reparation ones in the groups of the non-effective treatment that is indicated by an imbalance of free and protein-bound oxyproline and MP-9/TIMP-1 ratio. The exhaustion of compensatory mechanisms may be indicated by the lower level of aldosterone in the groups of the non-effective treatment and its reverse correlation with the prevalence of tuberculosis process and intoxication signs

Keywords: multidrug-resistant pulmonary tuberculosis, fibrosis, oxyproline, aldosterone, metalloproteinase-9, tissue inhibitors of metalloproteinase-1

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PNEUMONIAS IN IMMUNOCOMPROMISED PATIENTS: IMPROVEMENT OF TREATMENT USING THE IMMUNOMODULATOR

p. 21–27

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Aim of research: to optimize the approach to the treatment of pneumonias in patients on the background of acute leucosis from positions of immunoresistance based on using disodium glutamyl-cysteinile-glycine by the method of extracorporeal pharmacotherapy.

Materials and methods. Research group – 39 patients with pneumonia on the background of acute leucosis, who underwent the treatment according to the form and stage of the disease on the base of the hematological center “MI city multi-profile

clinical hospital No. 4» Dnipro city, 2015–2016. Mean age of patients 31,5±6,5 years, 11 women and 38 men. Patients of the main group were additionally administered with disodium glutamyl-cysteinile-glycine in 2 ml of 3 % solution (60 mg) i/v No. 5 each second day. The parameters of the immune response were studied: T and B-lymphocytes and their subpopulational composition (CD3⁺, CD4⁺, CD8⁺, CD19⁺, CD16⁺, CD56⁺) by the method of flow laser cytofluometry (BeckmanCoulter–USA). There were additionally determined; immunoregulatory index, leuco T-cellular index, leuco B-cellular index and index of leucocytes activation; phagocytosis state was assessed by the parameters: phagocytic number, phagocytic indicator, NBT-tests. The state of humoral immunity was assessed by levels of immunoglobulins of classes A, M and G by the method of immunoturbidimetry (BeckmanCoulter–USA).

Results. The analysis of parameters of cellular and humoral immunity of patients with pneumonias on the background of AL by the improved method of treatment of pneumonia using the immunomodelling preparation disodium glutamyl-cysteinile-glycine proved the positive influence on the immune reactivity of patients' organism, manifested by the reliable increase of the relative quantity of the pool of T-helpers (CD4⁺), NK-cells, increase of immunoregulatory index, PI, PN and increase of humoral immunity indices.

Conclusions. The improved method of pneumonia treatment on the background of AL using the immunomodelling preparation disodium glutamyl-cysteinile-glycine by ECPT method proved the positive influence of the immune reactivity of patients' organism, manifested by the reliable activation of phagocytosis and anti-infectious protection, manifested by the more expressed effect of pneumonia treatment: improvement of the clinical course of disease; decrease of the prognosticated number of ABT days and earlier return to the program treatment of AL. The obtained effects of the improved method of pneumonia treatment in patients with acute leucosis at using the immunomodelling preparation disodium glutamyl-cysteinile-glycine by ECPT method proves the pathogenetic validity of the possibility of optimization of pneumonia treatment from positions of immunoresistance

Keywords: pneumonia, immunity disorders, glutamyl-cysteinile-glycine disodium, cellular and humoral immunity indices

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ACTUAL APPROACHES TO PHYSICAL REHABILITATION OF PATIENTS WITH ISCHEMIC HEART DISEASE AND COMPLICATED PATHOLOGY AFTER MYOCARDIUM SURGICAL REVASCULARIZATION

p. 28–32

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The aim of the research is to assess the effectiveness of restoration treatment using hydrokinesotherapy in patients with ischemic heart disease (IHD) and concomitant pathology after surgical revascularization of the myocardium (SRM).

Methods of the research. 280 patients with IHD and concomitant pathology after SRM were examined. 135 patients (group 1) received the standard treatment. 145 patients (group 2) received differentiated complexes of restoration treatment depending on the concomitant pathology adding hydrokinesotherapy. The groups were divided in subgroups depending on the concomitant pathology: A – concomitant arterial hypertension, B – diabetes mellitus, C – osteoarthritis. We realized the dynamic clinical observation of the objective and subjective patients' states, instrumental and functional methods of examination (ECG, EchoCS, Holter monitoring of ECG, measurement of arterial pressure, heart rate, veloergometry, six-minute test (SMT)).

Results. After the course of rehabilitation patients of all groups demonstrated the improvement, but the statistically reliable one was observed in group 2. According to the results of six-minute test of walking (SMT), the increase of the distance by 30,0, 19,6 and 30,0 % was observed in subgroup 2A, 2B, 2C corresponding to ($p \leq 0,05$). The reliable increase of tolerance to a physical load was observed in patients of 2 group, in subgroup A1 – by 80,4, in subgroup 2B – by 62,0, and in subgroup 3B – by 32,2 % ($p \leq 0,05$).

Conclusions. Thus, the inclusion of hydrokinesotherapy in the complex differentiated programs of rehabilitation of patients with ICD and concomitant pathology after SRM is safe and effective, moreover, it favors the myocardium contractile ability and increase of tolerance to a physical load

Keywords: ischemic heart disease, surgical revascularization of myocardium, restoration treatment, physical rehabilitation

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THE TRIGGER MEANING OF PERSISTENT INTRACELLULAR PATHOGENS WITH PROLONGED FEVER AND SUBSEQUENT DEVELOPMENT OF SOMATIC PATHOLOGY IN CHILDREN

p. 32–36

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Despite the intense study of intracellular infections, the data as to their clinical-diagnostic and prognostic value still contradictory, especially in children of young age. Especially, prolonged fevers (fevers of an obscure generation) may be the manifestation of a series of infectious and somatic diseases with the further formation of a chronic somatic pathology.

The interest to this problem is connected, from the one side, with the necessity to prognosticate, early detect and primarily prevent a somatic pathology, forming groups of the high risk. From the other side, the possibility of transformation of an acute pathology in children in a chronic somatic pathology in adults is well-known.

The aim of the research was to improve the diagnostics of the infectious pathology, caused by intracellular pathogens in children, especially at prolonged fevers (fevers of an obscure generation), by improving the diagnostics quality, based on the deepened study of clinical-pathogenetic features of these pathological states.

Methods. There was realized the clinical and laboratory examination of 100 children with prolonged fevers (fevers of an obscure generation), admitted without a set diagnosis. The etiological interpretation was realized by the methods of serological markers (ELISA) and molecular-genetic ones (polymerase chain reaction). The interpretation of levels of blood interleukins was realized by IEA, using ProCon IL-1 β , 4, 6, TNF- α , interferon- γ reagents.

As a result of etiological pathogens verification, there were revealed beta-hemolytic streptococcus, virus of simple herpes of 1, 2 types, cytomegalovirus Epstein-Barr, chlamydiosis, mycoplasma, adenoviruses as both mono- and mixed infections. According to the research results, 90 % of children demonstrat-

ed the high severity and changed status of cytokines and local protective factors. More serious disorders of the immune system are revealed at mixed viral and atypical infections and somatic diseases. Different disorders of the autoimmune mechanism of development, namely system diseases of the connective tissue can appear in children with different variants of intracellular infections.

Conclusions. Clinical-anamnestic, laboratory conclusions and immunologic research using the system analysis allow to prognosticate results in the catamnesis of children with intracellular infections of different somatic pathologies, and the multi-vector and correlation analysis allow to elaborate new diagnostic criteria

Keywords: intracellular pathogens, intracellular infection, interleukins, local protective factors, somatic pathology

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THE CENTRAL HEMODYNAMICS ASSESSMENT METHODS IN THYROTOXICOSIS PATIENTS UNDER INHALED ANESTHESIA

p. 37–42

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Aim: To assess the central hemodynamics using calculation forms and invasive-noninvasive systems on the background of using inhaled minimal-streaming anesthesia at thyroidectomies in patients with thyrotoxicosis.

Materials and methods. The study included 44 patients with the syndrome of thyrotoxicosis (diffuse thyrotoxic goiter – 31 patients (70,45 %), multi-node goiter – 10 (22,74 %) and toxic adenoma – 3 patients (6,81 %)), operated under the general anesthesia as inhaled anesthesia by sevoflurane by the method of minimal stream (FGF=400 ml/min., Sev 3,0 vol%). Women – 40 patients (91,9 %), men – 4 (9,1 %) patients. Mean age 47,61±2,39 years, BMI 25,89±0,53 c.u., body surface area 1,82±0,02 m². The assessment of systolic arterial pressure (APs), diastolic (APd), mean AR (MAP), sphygmic pressure (SP), HR, mean pressure in the aorta, (MPA). There was studied the index of the proper minute volume of blood circulation (PMCB) based on values of the proper main metabolism (PMM). The parameters of the central hemodynamics were studied intraoperationaly (after patient's intubation) after esophageal dopplerography on the apparatus Cardio Q («Deltex Medical», Great Britain) and esCCO™ method (monitor Vismo, Nihon Kohden). esCCO™ method (calculative continuous heart ejection) and calculative formulas by: Starr, Lillier-Shtrander, Tsander, RU No. 2481785.

Results and discussion. Calculative indices by M.M. Savitsky formula don't reliably differ comparing with the objective instrumental method of hemodynamics control by DopplerEchoCG and can be used as initial indices for the comparison with instrumental and calculative ones. At the analysis of APs, APd, MAP, SP in control points, it was observed, that at patient's admission to a surgical room MAP and MPA on 2 control reliably ($p<0,001$) increased by 7,3 % and 6,7 % respectively comparing with 1 control, connected with the natural anxiety of a patients before the surgical intervention. After the input anesthesia the reliably ($p<0,001$) lowest indices of MAP, MPA, SP, APs, APs on 3 control by Wilcoxon criterion were observed. They were stabilized at following stages of anesthesia. MVB and HI on all control points, according to the data of calculative formulas by Starr, Lillier-Shtrander and Tsander, have reliably ($p<0,05$) lower values by Wilcoxon criterion than according to instrumental data by DopplerEchoCG. The calculative indices MVB and HI, according to the RU No.2481785 have reliably ($p<0,05$) higher values by Wilcoxon criterion on all control points than by DopplerEchoCG instrumental data. MVB, GPVR, HI, obtained using the method of esCCO Vismo monitoring had the least degree of deviations from DopplerEchoCG data. Spearman correlation between these indices was 0,83 (strong direct connection, $p<0,05$). Spearman correlation is absent between indices of the calculative formulas of Starr, Lillier-Shtrander and Tsander and data of DopplerEchoCG ($rs=-0,07$ and $rs=-0,14$ respectively).

The indices by the data of the patent RU No.2481785 have rather high mistake by the data of DopplerEchoCG comparing with esCCO method, but demonstrate the moderate correlation with them $rs=0,38$ ($p<0,05$). There is the strong direct correlation between indices of the invasive CardioQ EDM and non-invasive esCCO method ($rs=0,75$; $p<0,05$). Among calculative indices, the most correlation with data of esCCO method is demonstrated by indices by the patent CRU No. 2481785 ($rs=0,38$, $p<0,05$), indices by Starr, Lillier-Shtrander and Tsander formulas have no correlation with esCCO method.

Conclusions. Calculative indices by M. M. Savitsky formula don't reliably differ comparing with DopplerEchoCG data and can be used as initial indices for the comparison with instrumental and calculative ones.

Calculative indices by the data of Starr, Lillier-Shtrander and Tsander formulas underestimate MVB, HI and have no correlations comparing with instrumental assessment methods. Indices by the patent RU No.2481785 give overestimated values of MVB and HI, but have the moderate correlation ($rs=0,38$; ($p<0,05$) with both DopplerEchoCG and esCCO data.

After the input anesthesia there is observed the reliable ($p<0,05$) decrease of MVB and HI by doth data of invasive monitoring – esophageal dopplerography by Cardio Q system, and non-invasive esCCO™ monitoring method (calculative continuous hearth ejection), stabilized at 5–6 stages of the operation.

There is the moderate correlation between indices of data of invasive (Cardio Q) and non-invasive (esCCO™) monitoring at the level $rs=0,75$ ($p<0,05$).

esCCO method allows to study fluctuations of the central hemodynamics at equal stages of anesthesia maximally effectively, it is a simple non-invasive method of control of the central hemodynamics with the high degree of correlation with DopplerEchoCg indices

Keywords: central hemodynamics, methods of assessment, invasive/non-invasive control, inhaled anesthesia, thyrotoxicosis

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STUDY OF THE STRUCTURE OF HEPATITIS C VIRUS, WHICH CIRCULATE AMONG THE POPULATION OF THE REGION OF UKRAINE WITH AN AVERAGE DEGREE OF URBANIZATION

p. 43–49

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The aim of the research is the study of hidden mechanisms of development of the epidemic process of hepatitis C, dynamics of changes of the structure of HCV genotypes that circulate among the population of the Ukrainian region with an average stage of urbanization.

The morbidity of AHC for 1993–2016 and the morbidity of the CHC for 2010–2016 of the population of the Rivne region of the Northwestern region of Ukraine were analyzed in the study, as well as the morbidity of these infections was presented compared with other regions of Ukraine (for 2015–2016). The HCV genotypes for the period of 2011–2016 were determined in 70 primary blood donors in whom the HCV genetic markers were firstly detected by RT-PCR method and a change in the genotype structure was showed compared to data obtained in 1996–1997. Sequencing of the core HCV area of 322 n.s. was performed non-type by RT-PCR method of three HCV isolates.

Methods of research: epidemiological, molecular-genetic (RT-PCR and sequencing), statistical.

Results. The dynamics of HC epidemic virus at the territory of Rivne region of the Northern-Western region of Ukraine is conditioned by the self-reconstruction of HCV population that takes place as a result of evolutionally fixed mechanisms of changeability (3,7±2,09 % of persons with 1b HCV subtype at the area core HCV area with size 322 n.s. demonstrated the point natural changeability from 6 to 13 nucleotide sequences) and fluctuations in changeability indices of HCV population. For the last 20 years there was revealed the reliability of differences in the width of prevalence of separate HCV genotypes: decrease of the

specific weight of 1b HCV subtype from $85 \pm 8,19\%$ to $51,43 \pm 5,97\%$ ($p < 0,05$) and increase of the specific weight of 3a HCV subtype from $10,0 \pm 6,88\%$ to $31,43 \pm 5,55\%$ ($p < 0,05$).

Conclusions. It gives ground to recommend to realize the permanent molecular-genetic monitoring of HCV by RT-PCR method and sequencing of the part of HCV genome for detecting hidden mechanisms of the development of the epidemic process of hepatitis C at the studied territory

Keywords: acute hepatitis C, chronic hepatitis C, genotypes of virus of hepatitis C, natural changeability of virus

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