

INTERRELATION BETWEEN MIXED CRYOGLOBULINEMIA AND DEVELOPMENT OF LIVER FIBROSIS IN CHRONIC HCV INFECTION

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Purpose of the study – identify the interrelation between mixed cryoglobulinemia and morphological changes of the liver in patients with chronic hepatitis C. Patients and methods. Under the supervision there were 30 chronic HCV patients with the presence of mixed cryoglobulinemia aged 27 to 58 years (men - 19, women - 11). The following methods were used in this research work: clinical, virological (identification of HCV), spectrophotometric (determination of cryoglobulins), morphological investigation of liver. Results of the research. Among surveyed patients following stages of liver fibrosis were diagnosed: F1 - in 8 (26,7%), F2 - in 8 (26,7%), F3 - in 6 (20,0%), F4 - in 8 (26,7%) patients. Our results demonstrated significantly higher ($p < 0,05$) level of mixed cryoglobulins in the serum of patients with fibrosis stage F 3-4 ($0,79 \pm 0,03$ opt.un.), than in the serum of patients with liver fibrosis F 1-2 ($0,70 \pm 0,03$ opt.un.). Positive correlation between the concentration of mixed cryoglobulins in serum and severity of liver fibrosis ($r = +0,32$, $p < 0,05$) was detected. Besides, patients with liver fibrosis stages F 3-4 had greater ($p < 0,05$) incidence of some clinical signs of cryoglobulinemic syndrome compared with patients with stage liver fibrosis F 1-2: general weakness - 10 (62,5%) and 14 (100%), skin purpura - 2 (12,5%) and 10 (71,4%), Meltzer's triad - 1 (6,3%) and 6 (42,8%) respectively. Conclusions. In chronic HCV patients with mixed cryoglobulinemia liver fibrosis F 3-4 degree is associated with higher level of cryoglobulins in serum and greater incidence of clinical signs of cryoglobulinemic syndrome.

ANTIOXIDANT SYSTEM PECULIARITIES AT NEWLY DIAGNOSED LUNG'S TUBERCULOSIS AND HIV/TUBERCULOSIS CO-INFECTED PATIENTS

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The aim. To detect antioxidant system peculiarities at newly diagnosed tuberculosis and HIV/tuberculosis co-infected patients. Materials and methods. 100 patients with HIV/tuberculosis (1 group), newly diagnosed tuberculosis (2 group) and 32 healthy donors were examined. Catalase activity by Koroluk M.A. method, superoxide dismutase activity (SOD) by Hoglof B. method, glutathione level by standard method, glutathione-reductase (GR) and glutathione-peroxidase (GP) levels by Beutler E. method, glutathione-transferase level by Habig W.H. method were determined. Results. Catalase activity were decreased at co-infected patients in comparison with control and tuberculosis: $3,0 \pm 0,31$; $4,49 \pm 0,37$ and $4,45 \pm 0,22$ mcut/g/min, $p < 0,05$, in accordance. SOD was increased at co-infection ($5,79 \pm 0,84$), decreased at tuberculosis ($1,86 \pm 0,33$) in comparison with control ($2,94 \pm 0,61$ units/mg), $p < 0,05$. Glutathione levels were decreased at all the patients: $1,1 \pm 0,12$ at 1 group, $1,23 \pm 0,23$ – at 2 and $1,53 \pm 0,15$ mcmol/g Hb at control, $p < 0,05$. GR and GP levels were lower at co-infected patients ($1,39 \pm 0,18$ and $11,9 \pm 1,5$) in comparison with tuberculosis patients data ($2,08 \pm 0,35$ mcmol/g and $14,7 \pm 2,5$ IU/g Hb), $p < 0,05$. Conclusion. Catalase activity, GR and GP levels decrease at co-infection HIV/tuberculosis. Glutathione activity decrease at all the patients. SOD decrease at tuberculosis and increase at co-infection.

IS THE OBSTRUCTIVE UROPATHY A SEQUENCE OF VASCULAR DISORDERS IN BPH PATIENTS?

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Introduction & objectives: Benign prostate enlargement (BPE) and vascular diseases are both common in aging men. The aim of this study was to determine the role of concomitant vascular disorder in BPE progression and development of obstructive uropathy (OU). Material & methods: A case control study of 175 patients (hospitalized from March 2013 to March 2014) with diagnosed BPE, complicated by obstructive uropathy was performed. The inclusion criteria were bilateral retention of upper urinary tract, chronic urinary retention (residual urine volume more than 200ml) and ischuria paradoxa. Group of 107 patients with BPE, without obstructive uropathy complications served as a control group. Patients' evaluation data included: LUTS assessment (by IPSS), digital rectal examination, urinary tract ultrasonology, urine analyses, serum creatinine level. Cardiologists' assessment records were considered for diagnosing of concomitant vascular disorders. Exclusion criteria were bilateral urolithiasis, beforehand drained urinary tract, neurological pathology with pelvic organs' affection. The data were analyzed by StatSoft Statistica 6.0 software. Results: Both groups didn't differ by patients' age ($70,93 \pm 6,6$ vs $70,45 \pm 8,3$, $p = 0,9$). Between the two groups there was no significant difference in mean prostate volume ($70,35 \pm 40,9$ vs $71,35 \pm 38,3$, $p = 0,73$) and presence of intravesical prostate growth (42,1% & 44,7%; $p = 0,93$). Expression of clinical components of metabolic syndrome (MS) (atherosclerosis, diabetes mellitus – II, hypertension) estimated by logistic regression is significantly more pronounced in the group with obstructive uropathy ($p < 0,001$). Among MS components the most significant difference between groups has

atherosclerosis (coronary, aortal, cerebral, lower extremities). No correlation between prostate volume and presence of MS components was found ($p>0,05$). Conclusion: Patients with BPE complicated by OU are more often affected by concomitant vascular pathology, in comparison to patients with uncomplicated BPE. Age, prostate volume and growth pattern do not affect the progression of OU. Our results support the hypothesis that vascular pathology plays an important role in the development of OU in patients with BPE.

THE MEANING OF DANCING AEROBICS DURING PHYSICAL TRAINING OF STUDENTS OF MEDICAL SCHOOL

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The most popular, mass and popular type of motor activity among students in recent years have been aerobics and its variants. One of the most significant reasons for the decline of interest in aerobics respondents believe; excessive complexity of gymnastic complexes that for students who do not have a sufficient level of coordination abilities and motor experience, is an insurmountable obstacle. To study the effectiveness of using aerobics for improvement of students we have observed for the two groups of students of 1 and 2 courses ZSMU. One of them - the control group (CG) during physical education classes worked on the curriculum, the second - a group of observations (GN) was engaged in a dance aerobics, and facilities for aerobics various coordination complexity chosen differentiated, depending on the level of development of coordination abilities and motor experience of students. Students took a survey to assess the relationship motivationsnotsenostnogo for classes. On the basis of the student dispensary ZSMU at the beginning and end of the school year complex medical examination with a certain level of physical health by Apanasenko. In a year classes in CG and GN there was a significant increase in the amount of points that characterize the level of physical health by 26,40 and 47.2% Increased levels of physical health and performance, respectively, describing his due, in our view, change value motivation relation to physical education classes as a whole, and students in dancing aerobics classes in particular. If in the beginning of the school year, leading motive physical education classes, certification was on the subject, the by the end of the school year, there was a redistribution of motivational-value orientation. The optimal combination of exercise during the course of dance aerobics and complex health facilities contributes to higher self-regulation, self-control and self-analysis increases the level of activity of students and conscious control of their functional state, resulting in increased efficiency, the level of physical fitness and physical health, general health effect is achieved.

PREDICTING EARLY LETHAL OUTCOME AFTER ACUTE ISCHEMIC SUPRATENTORIAL STROKE USING CLINICAL PARAMETERS AND PARAMETERS OF QUANTITATIVE ELECTROENCEPHALOGRAPHY

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Background: Elaboration of statistical models to predict early lethal outcome (ELO) after acute ischemic supratentorial stroke (AISS) is a very important and relevant in modern angioneurology that can help the practitioners to improve treatment approaches. We therefore developed new model using clinical parameters and parameters of quantitative electroencephalography (QEEG). Methods: 120 patients (mean age $67,8\pm 0,8$ years) were studied within first 72 hours after clinical onset of AISS. Clinical examination included evaluation by National Institute of Health Stroke Scale and Full Outline of UnResponsiveness score (FOUR). Separately to affected and intact hemisphere the values of absolute spectrum rhythm power (ASRP), relative spectrum rhythm power (RSRP), brain symmetry indexes (BSI) of δ -, θ -, α -, β -ranges, θ_{lo} -, θ_{hi} -, α_{lo} -, α_{hi} -, β_{lo} -, β_{hi} -subranges were detected. Development of prognostic model was made by logistic regression and ROC-analysis. Results: Out of 120 stroke patients, 13 (10,8%) was dead. Near 60 models were obtained. The model with the largest area under the curve (AUC=0,9964) was: $\beta=11,1-1,282*(FOUR \text{ score on the 1st day})-0,812*(FOUR \text{ score on the 3rd day})+0,31*(RSRP \text{ of } \delta\text{-range in intact hemisphere})-15,305*(BSI \text{ (ASRP of } \alpha\text{-range/ASRP of } \beta\text{-range)})$. Significance level of Hosmer-Lemeshow-test for selected model $p=0,9977$, Percent Concordant=99,6. Optimal cut-off value of β , which predicted ELO with sensitivity=92,3% and specificity=99,3%, was determined. Conclusions: Developed prognostic model might be a powerful tool for predicting ELO after AISS and improving effectiveness of treatment.

DEVELOPMENT OF NEW PROGNOSTIC MODEL FOR PREDICTING POOR FUNCTIONAL OUTCOME AFTER ACUTE ISCHEMIC SUPRATENTORIAL STROKE USING CLINICAL PARAMETERS AND PARAMETERS OF QUANTITATIVE ELECTROENCEPHALOGRAPHY

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Background: Elaboration of statistical models to predict functional recovery after acute ischemic supratentorial stroke (AISS) is a very important and relevant in modern angioneurology that can help the practitioners to improve treatment approaches. We therefore developed new model using clinical parameters and parameters of quantitative electroencephalography (QEEG). Methods: 107 patients (mean age $67,9\pm 0,8$