

PATHOMORPHOSIS OF PSYCHIATRIC ILLNESSES AFTER TRAUMATIC BRAIN INJURY (TBI)

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Introduction: TBI is a worldwide public health problem. It has already been named the “silent epidemic” because of the limited popular knowledge about the issue and of its symptoms, such as memory and cognitive problems, which may not be immediately evident or appear in future. For example, at least 1.4 million cases of TBI occur each year in the United States, among them, about 50,000 are fatal, 235,000 of people are admitted to emergency departments and 1.1 million of people are treated in hospitals after 10-15 years. Aim: To compare the psychiatric disorders in long term period (LTPTBI) after traumatic brain injury according to during the last 45-50 years. Methods and materials: Statistical (comparing and catamnestic) literature analysis of 36 different literature sources in the period from 1970 up to 2017, in order to fixate transformation of the developed decreased mental functions or psychotic states in LTPTBI. Results: After comparing both the groups it was found that in all the cases of APTBI, disordered consciousness in different variations was seen (from decreased level of consciousness up to psychotic level), which depends in the majority of situations from pre-morbid state of the patients, as agreed by all the authors. LTPTBI demonstrated developing of different forms of psychoorganic syndrome, epileptic like states, organic personality disorders etc. Nowadays, investigations show increasing of schizophrenic like psychosis in APTBI and formation of untreated disorders of mentality in LTPTBI. Conclusions: The greatest risk of developing mental disorders is in the 1st year after suffering from a cerebral trauma, but even after 15 years there was a significantly increased risk. According to the analysed data, it may be stressed that in the last years we can see pathomorphosis of psychiatric disorders as a result of TBI, which probably may be explained by widely spread usage of psychoactive substances, that have been reflected in the protocols of treatment of the lesions by neuroleptics of new generation.

MULTIMORBIDITY OF HYPERTENSION AND OBESITY: FOCUS ON CARDIOVASCULAR REMODELING

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Numerous epidemiological studies have shown the presence of nosological syntropy between obesity and hypertension. According to NHANES prevalence of hypertension among people suffering from obesity is 42.5% compared with 27.8% for those who are overweight, and the population mortality rates and relative risk among hypertensive patients were increased progressively in patients with obesity. Objective: to evaluate the structural and functional restructuring of the heart and blood vessels in patients with stage II hypertension associated with obesity. Materials and methods: general clinical examination, echocardiography, pulsed-wave Doppler of brachiocephalic vessels. The study involved 100 patients with hypertension stage II. Into the obese group 82 patients were included while the group with normal weight contained 18 patients. Results. Patients with essential hypertension with obesity have significantly larger dimensions of LA in diastole by 11.1% ($p = 0.007$), IVSTd by 23.7% ($p = 0.001$) LVMI by 14.3% ($p = 0.022$) and a reduced volume-mass index of LV, volume by 18.8% ($p = 0.013$). In patients with essential hypertension with obesity a significant decline of Vmax was observed in the left CCA by 16.5% ($p = 0.003$) and in the right CCA by 12.6% ($p = 0.046$), Vmean in the left CCA by 16.8% ($p = 0.001$) and in the right CCA by 14.4% ($p = 0.009$), and reduced Vmax by 19.1% ($p = 0.002$) and Vmean by 21.9% ($p = 0.002$) in the right ICA. Parameters of Vmax and Vmean in the left MCA in patients with essential hypertension with obesity were lower by 10.2% ($p = 0.043$) and 12.5% ($p = 0.044$). Hypertensive obese patients were characterized by lower linear Vmax in the left VA by 13.9% ($p = 0.015$) and Vmean by 14.5% ($p = 0.013$), in the right VA Vmax was lower by 17.7% ($p = 0.011$), and Vmean by 25.8% ($p = 0.003$). Conclusions: 1. Structural and geometric alteration of the heart in patients with essential hypertension with obesity are characterized by significant increase in the size of the left atrium in diastole, interventricular septum thickness in diastole, left ventricle mass index and reduced volume-mass index of left ventricle compared to patients with essential hypertension with normal body weight. 2. Hypertensive patients with concomitant obesity compared to patients with essential hypertension with normal body weight demonstrate the decrease in blood flow in the common carotid, right internal carotid, left middle cerebral and both vertebral arteries.