

METHOD OF DIAGNOSIS NONALCOHOLIC FATTY LIVER IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Key words: NAFLD, 13C-MBT, steatosis, steatohepatitis, portal vein.

Introduction. Usually for the determination of nonalcoholic fatty liver disease (NAFLD) there are instrumental and laboratory techniques, including ultrasound, transaminases level, fibrotest etc. These methods in the diagnosis of NAFLD clinical forms is not specific and do not allow make difference between steatosis and steatohepatitis. However, more attention is paid to early diagnosis of NAFLD by using a special set of design formulas biochemical parameters, data Fibroscan or respiratory test with 13C-methacethine (C13-MBT). The determination of NAFLD clinical form is a priority in the prediction of further disease and choice of treatment. Steatohepatitis is an active form of NAFLD and often progresses to fibrosis with subsequent liver parenchyma degeneration into cirrhosis. Simultaneously, steatosis could be possibly treated in the early stages of disease.

Methods. The study involved 65 patients with type 2 diabetes and coronary heart disease with metabolic syndrome, aged 37 to 82 years (mean age $55,82 \pm 3,46$), 29 men, 36 women. According to the ultrasound, the level of fatty infiltration were differentiated by such criteria as diffuse liver parenchyma echogenicity intensification

against the background of a slight increase in its size (liver echogenicity was significantly higher than normal kidney or lumbar muscle echogenicity) for steatosis; hyperechogenicity of liver parenchyma and expansion of portal vein (13 mm or more in diameter) - for steatohepatitis.

Results. For steatosis and steatohepatitis determination the ALT monitoring was used, where the level exceeding 0.68 mmol/l signed to steatohepatitis, and below 0.68 mmol/l - to steatosis. Portal vein diameter size above 13 mm subscribed steatohepatitis, and below 13 - steatosis. 13C-MBT data, which showed the level of liver antitoxic function, was used. 13CO₂ range on 120 minute from 15% till 10% was classified as decreased detoxification liver function means steatohepatitis, range from 20% till 15% - steatosis. The present study found that ALT and portal vein diameter negatively correlated with cumulative dose 13CO₂ on 120 minute in patients with steatohepatitis.

Conclusion. Cumulative dose 13CO₂ on 120 minute range from 15% to 10% with simultaneously ALT level increasing (more than 0.68 mmol/l) and portal vein diameter enlargement (over 13 mm) are criteria of steatohepatitis.

THE SCREENING OF ADAPTATIONAL POTENTIAL IN PATIENTS WITH SURGICAL STRESS

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Key words: stress, electromyography, pain perception, autonomic nervous system

The degree of stress expressiveness in surgical patients depends on the adaptation reserve of their organisms. That is why we aimed to make a screening of the adaptational potential in stomatological patients with different individually-typological peculiarities under condition of surgical stress.

The objects of clinical observation were 95 surgical stomatological patients. Their individual psychological characteristics were assessed by special questionnaire (S.Novikova, 2007) allowing defining the preference of either sthenic or asthenic manifestations in both emotions and behavior of the pa-

tients. Neurofunctional research was done by electromyography M-TEST. Stress in patients was induced by electrical stimulation of mental nerve till the appearance of pain reaction that was measured by method of exteroceptive suppression of arbitrary activity of masticatory muscles. It was determined: the threshold of pain, its range and tolerance to pain. According to the results of algometry all the patients were classified into 4 pain perception types (PPT). Adaptational vegetative cardiovascular reactions (AVCR) to stress were assessed by the Bayevsky index of functional changes (IFC) = $0,011 \cdot \text{pulse rate} + 0,014 \cdot \text{systolic blood pressure} + 0,008 \cdot \text{diastolic blood pressure} + 0,014 \cdot \text{age} + 0,009 \cdot \text{body weight} - 0,009 \cdot \text{growth} - 0,27$.

26 patients with asthenic psychotype in which the threshold of pain and pain tolerance were not high ($9,62 \pm 2,07$ mA and $25,41 \pm 1,47$ mA respectively) belong to the 1st PPT. In these patients AVCR were unsatisfactory (IFC = $3,35 \pm 0,49$ points). In patients with 2nd PPT threshold of pain sensitivity was similar to those of the 1st type, but the range proved to be much longer because of the high threshold of pain tolerance – $35,61 \pm 0,95$ mA ($p < 0,01$). In this group we noticed func-

tional manifestations of stress-induced analgesia accompanied by exertion of adaptation mechanisms – IFC = $2,86 \pm 0,14$ points. Such PPT was diagnosed in 35 patients with a great prevalence of sthenic features ($5,8 \pm 1,2$ points). High pain thresholds ($25,91 \pm 2,49$ mA) were diagnosed in patients with 3rd and 4th PPT, however, owing to the insufficient activity of endogenous antinociceptive system in the 3rd group the range of pain sensitivity was short – $6,9 \pm 1,73$ mA ($p > 0,05$). Such PPT was found in 15 patients. They manifested both sthenic and asthenic features during psychological testing, Bayevsky stress index (IFC = $3,48 \pm 1,12$ points) showed unsatisfactory adaptation of cardiovascular system to stress in these patients. High indicators of antinociceptive system activity were found in patients with 4th PPT including personalities having considerable sthenic characteristics. They showed to have tolerable adaptation of cardiovascular system to stress (IFC = $2,35 \pm 0,89$ points).

Adaptational potential of patients under stressogenic influence depends on their individual-typological peculiarities, level of antinociceptive system activation and autonomic nervous system condition that should be considered in perioperative medication management.

EMOTIONAL INTELLIGENCE AS RESOURCE OF STRESS-RESISTANCE OF PERSONALITY

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Key words: emotional intelligence, psychology, self-motivation, adaptation

Introduction. The concept of emotional intelligence is relatively new in psychology. There are different models of understanding emotional intelligence. In particular, D.Goleman includes into this term ability to self-motivation, resistance to frustration, control over emotional outbreaks, ability to abandonment of pleasure, mood regulation and the ability to think on the background of strong emotions, empathize, and trust. Model of J.Meyer and M.Salovey include mental skills that determine the psychological health of the individual, including his stress-resistance, sustainability and adequacy of self-esteem, activity, ability to effec-

tively plan life steps and, accordingly, manage his own behavior. The above features reduce the potential of victimity and contribute to the growth of personality stress-resistance.

Methods. We conducted a psychological study that examined the level of emotional intelligence of respondents and the presence of different forms of victimal behavior in them. We used the "Questionnaire for emotional intelligence EMIN" D.V.Lucin and the "Test for the determination of propensity to victim behavior" O.O.Andronikova, we calculated the Pearson correlation coefficient is calculated for the obtained results. The