

PLACE OF TUMOR NECROSIS FACTOR ALPHA AMONG ACUTE PHASE PARAMETERS OF INFLAMMATION IN NONALCOHOLIC FATTY LIVER DISEASE

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INTRODUCTION. According to the current model of the pathogenesis of nonalcoholic fatty liver disease (NAFLD), the systemic low-level inflammatory process is the basis of the disease progression, initially caused by macrophage infiltration of visceral adipose tissue [1, 2]. Timely recognition of inflammation is extremely important for the diagnosis of NAFLD, especially for differential diagnostics between its early forms — hepatosteatosis (HS) and steatohepatitis (SH), for the rationale therapy and the prognosis of the disease course [3, 4]. Laboratory markers of inflammation have a different sensitivity in the early forms of NAFLD [1].

The aim of the study was comparative evaluation of the importance of traditional laboratory parameters of inflammation — leukocyte count, erythrocyte sedimentation rate (ESR), C reactive protein (CRP), fibrinogen and the key proinflammatory cytokine tumor necrosis factor-alpha (TNF- α) in the early forms of NAFLD — in HS and SH.

MATERIALS AND METHODS. A total of 106 patients were examined: 33 — HS (18 — 54.5% of men, 15 — 45.5% of women, aged 52.3 ± 10.6 years) and 73 SH (50—68.5% of men and 23—31.5% of women, at the age of 47.2 ± 11.0 years). The diagnosis of NAFLD was established on the basis of clinical and laboratory data, abdominal ultrasound results, and in some patients — on the histological study of liver biopsy specimens. The concentration of TNF- α in the blood was determined by the method of non-competitive ELISA using the «Human TNF α Platinum ELISA

test system» («EBioscience», Austria) and «Sunrise» analyzer («Tecan», Switzerland). The control group consisted of 18 healthy persons: 9 men and 9 women aged 32.6 ± 10.0 years. Statistic processing of the data was conducted with application of Wilcoxon-Mann-Whitney U criterion. Differences were significant at $p < 0.05$.

RESULTS. The level of leukocytes in HS was $5.9 \pm 1.2 \cdot 10^9/l$, in SH — $6.3 \pm 1.4 \cdot 10^9/l$ ($p > 0.05$), both indicators did not differ from that in healthy individuals — $6.1 \pm 0.3 \cdot 10^9/l$ ($p > 0.05$). The frequency of leukocyte level increase was higher than the reference value in HS in 3.0% of patients, in SH — in 12.3% of patients ($p < 0.05$).

The level of ESR in HS was 13.3 ± 5.5 mm/h., in SH — 14.9 ± 6.8 mm/h. ($p > 0.05$), and both indicators did not differ significantly from those in healthy subjects — 6.0 ± 2.4 mm/h. ($p > 0.05$). The frequency of ESR increase was higher than the reference ERS value in HS — in 21.2%, in SH — in 27.4% of patients ($p > 0.05$).

The level of fibrinogen in HS was 3.0 ± 1.2 g/l, in SH — 3.3 ± 0.7 g/L ($p > 0.05$), both indicators did not differ significantly from those in healthy subjects — 2.5 ± 0.5 g/l ($p > 0.05$). The frequency of fibrinogen increase was higher than the reference fibrinogen value only in SH — in 13.7% of patients.

The CRP concentration in HS was 3.7 ± 1.0 mg/l, in SH — 10.8 ± 4.9 mg/l ($p < 0.05$), both of which were significantly higher than those in healthy subjects — 1.5 ± 0.5 mg/l ($p < 0.01$). The frequency of CRP

increase was higher than the reference value in HS in 15.2%, in SH — in 50.7% of patients ($p < 0.05$).

The concentration of TNF- α in HS was $6,0 \pm 1,8$ pg/ml, in SH — $6,8 \pm 2,1$ pg/ml ($p > 0.05$), both of which were significantly different from those in healthy individuals — $3,8 \pm 1,1$ pg/ml ($p < 0.05$). The frequency of TNF- α increase was higher than the reference value in HS in 63.6% and in SH — in 79.5% of patients ($p < 0.05$).

CONCLUSION. Thus, TNF- α proved to be a more sensitive indicator of inflammation in comparison with the conventional markers of this syndrome - it significantly increased already at the stage of hepatosteatosis, allowing a timely forecast of the probability of the transformation of steatosis into steatohepatitis and justify therapy.

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FEATURES OF THE DAILY DYNAMICS OF BLOOD PRESSURE IN HYPERTENSIVE PATIENTS DEPENDING ON THE DEGREE OF HEPATIC ENCEPHALOPATHY DYSIRCULATORY

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Despite the large number of works devoted to the study of the state of the brain in patients with essential hypertension (GB), up to the present time is not the influence of developing disorders of cerebral blood flow on the clinical course of arterial hypertension.

Aim: to study features of the dynamics of HELL during the day a patient of GB at different stages of development DE using the method of daily monitoring of blood pressure (ABPM).

MATERIALS AND METHODS: To address this goal were examined in 150 patients. The ratio of men and women was 53 (35%) : 97 (65%) people. The average age of patients was $58,3 \pm 4,7$ years. The diagnosis

of GB was established in accordance with National guidelines and the European society of cardiology. Thus, patients with HD stage I in the sample was absent, whereas the incidence of stage II hypertension was 75%, and GB III stage — 25%. The degree of AG was determined in accordance with the classification who/ish 1999. The result of the distribution of patients according to the severity of hypertension in 54 patients (26.3%) were identified with its 1 degree, and 74 (49.3%) and 2 in 22 (14.6%) — 3rd degree. Determination of the degree of TE were made based on the neurological examination, as well as analyses of the magnetic resonance imaging of the brain was performed in 12% of patients. Gradation of the severity of the DAE was based on the classification proposed by E. V. Schmidt et al. (1971), E. I. Gusev (1985), by E.I. Burtseva et al. (1993).

1 group comparison ($n=45$) included patients of stage II hypertension with TE 1 degree. 2 group ($n=67$) included patients with stage II hypertension and DE 2nd degree. 3 group ($n=38$), consisted of patients with stage II hypertension and DE 3rd degree. All patients of this group had a documented history of acute ischemic stroke or transient ischemic attack, prescription for at least 9 months. A control group included 30 practically healthy individuals of appropriate study groups by sex and age.