

BIOCHEMICAL BLOOD ASSAY IN PATIENTS WITH CHRONIC HEPATITIS C (HCV RNA+) AND CYTOPENIA

Vasilyev S.Yu., Popova L.L., Konstantinov D.Yu.
State Medical University, Samara, Russia

Purpose: to study serum transaminases level (ALT and AST) in patients with chronic hepatitis C (CHC), HCV RNA+, with thrombocytopenia (TP).

Methods: We monitored 90 patients with CHC and TP (group I), 28-80 years old (mean age 48.2±15.2 years). Among them 59% were males and 41% were females. The diagnosis of CHC was confirmed for over five years. 100 patients with CHC without any hematological disorders were included in the control group (group II).

Results: Two-fold elevation of transaminases was detected in group I (ALT increase in 65.1% of patients, AST increase in 55.6% of patients) with mean value 59.32±14.5 U/l and 55.55±13.9 U/l, respectively. Elevation of ALT 2-5 times higher ULN was revealed in 31.1% of patients, with mean value 122.51±32.1. The same-fold elevation of AST was observed in 36.2% of patients, with mean value 137.05±19.1 U/L. 11 patients (7.4%) demonstrated increase of ALT higher 5 ULN (mean value 373.71±118.2 U/l), 9.4% of patients showed the same elevation of AST (mean value 358.42±105.9 U/l). Comparative analysis revealed significant lower mean value of ALT in group I patients than in group II patients (77.46±4.13 and 69.14±8.32 U/l, respectively). AST level was higher in group I patients (72.97±9.01 U/l vs 68.80±4.21 U/l in group II). De Ritis index (AST/ALT ratio) was 1.0 in group I and 0.8 in group II.

Conclusion: ALT and AST level is not higher than two times ULN in 60% of patients with chronic hepatitis C and thrombocytopenia and in 35% of patients with CHC without any hematological disorders. Higher AST/ALT ratio in patients with thrombocytopenia demonstrates more severe fibrosis stage.

CLINICAL AND LABORATORY INDICES PATIENTS WITH CHRONIC HEPATITIS C IN COMBINATION WITH DIABETES OF TYPE 2

Derbak M.A.¹, Siksay L.T.¹, Derbak Y.S.¹, Pichkar Y.I.¹,
Rozumik N.V.¹, Lemko I.I.²

¹Uzhgorodsky National University, Ukraine

²Transcarpathian Regional Clinical Hospital, Uzhgorod

The Aim is to learn the basic clinical and laboratory indices in patients with chronic hepatitis C (CHC) on the background of diabetes mellitus (DM) type 2.

Materials and methods. The study includes 325 patients with chronic hepatitis C divided into two groups: Group 1 (n = 175) - patients had only CHC and Group 2 (n = 150) - CHC + diabetes type 2. To establish HCV all patients were given antibodies to HCV in the serum using the method ELISA and RNA HCV, followed by viral load using the method PCR in real time. The presence of cytolytic and cholestatic syndromes was assessed by levels of the increase of the laboratory parameters (indices) of cytolysis (AST and ALT) in more than 2 times of normal and increase of alkaline phosphatase in more than 2 times of normal and bilirubin as indicator of cholestasis.

The results of the study. The analysis of clinical and biochemical data showed that the manifestations of the disease of the patients from the group 2 were recorded more frequently than of the patients of the group 1 (p < 0.05), in particular, asthenovegetative - by 36% (p < 0.01), dyspeptic - by 32.4% (p < 0.001). CHC patients without diabetes type 2 often had an increased ALT level (p < 0.05) and patients with chronic hepatitis C in combination with diabetes type 2 had significantly more increased AST activity (p < 0.001) and bilirubin because of the indirect fraction (p < 0.001) while other signs of liver cirrhosis were absent in both groups of patients. Such dynamics of enzymes indicated the severity of liver cells affection of the patients with chronic hepatitis C with concomitant diabetes type 2. The increase of AST witnesses of intracellular structures affection, and the indirect bilirubin increase indicates the decrease of the detoxification function of hepatocytes.

Conclusions. Metabolic disturbance characteristic of diabetes type 2 has an important impact on the progression of HCV-infection, which results in deeper lesion of hepatocyte intracellular structures and in reduce of its detoxification function.

COMPARATIVE ANALYSIS OF THE STRUCTURAL AND GEOMETRIC CHANGES OF THE LEFT VENTRICLE IN PATIENTS WITH CHRONIC HEPATITIS AND LIVER CIRRHOSIS OF VIRAL ETIOLOGY

Morozova T.S., Grishina, I.F., Gurikova I.A.

"Ural state medical University", Yekaterinburg, Russia

The aim of the study was to examine types of remodeling of the left ventricle (LV) of the heart in chronic hepatitis (CH) and liver cirrhosis (LC) viral etiology. The study included 84 patients with chronic hepatitis, associated with HBV, HCV infection, and 79 patients with LC B and C. Control group consisted of 50 healthy persons of comparable age and sex. All of them underwent transthoracic echocardiographic examination, which was performed on the ultrasonic device "Acuson 128 XP/10" (USA) sensor with a frequency of 3.75 MHz according to the methods recommended by the American Association of echocardiography. In the studied clinical groups was the analysis of the frequency of formation of various types of remodeling of the left ventricle of the heart in accordance with the classification proposed by A. Ganau (1992). The study found that in patients with viral LC remodeling with the development of myocardium's hypertrophy of LV (HMLV) occurred in 74 (93.7%) cases, while in 61 (77.2%) with the formation of the concentric type of HMLV. Eccentric variant of HMLV was observed less frequently, only in 13 (16.5%) patients with LC, concentric remodeling of the left ventricle was noted in 5 (6.3%) cases. Among patients with CH remodeling with the development of HMLV occurred in 54 (64.3%) of cases, with a concentric type of HMLV was detected significantly less frequently - in 43 (51.2%) patients (p < 0.05), whereas concentric remodeling was significantly more frequently than in viral LC - in 24 (28.6%) cases (p < 0.05). The frequency of formation of an eccentric variant of HMLV in patients with chronic viral hepatitis rarer than in LC of viral etiology - in 11 (13.1%) cases. Normal LV geometry in the group of patients with hepatitis was observed in 6 (7.1%) patients.

Thus, in patients with chronic viral liver disease leading types of changes the geometry of the left ventricle is remodeling with the formation HMLV, mainly with the development of its concentric options. This draws attention to the fact that this type of structural-geometrical reconstruction LV met significantly more frequently in viral LC (p < 0.05). It should be noted that the reasons for the frequent development of hypertrophic types of remodeling of the left ventricle in patients with chronic diffuse liver disease of viral etiology may be, on the one hand, inflammation as a damaging factor, on the other, the load on the myocardium as a result of increased peripheral vascular resistance.

COMPARATIVE EVALUATION OF LIVER SONOELASTOGRAPHY AND FIBROTEST IN PATIENTS WITH CHRONIC HEPATITIS C

Bondar A.E., Solomennik A.O., Sokhan A.V., Anciferova N.V.,
Blagko V.S., Deonega A.V.

National medical university, Kharkiv, Ukraine

In chronic hepatitis C (CHC) determining criterion of disease stage, prognosis and antiviral therapy tactics is liver fibrosis. For the diagnosis of liver fibrosis "gold" standard is needle biopsy of the liver. At the same time, several studies have proved the importance of diagnostic laboratory tests of blood (FibroTest) and sonoelastography. A combination of laboratory tests and sonoelastography increases the reliability assessment of liver fibrosis. The purpose: to compare the results of sonoelastography and FibroTest methods determining the stage of liver fibrosis in patients with chronic hepatitis C.

Materials and methods: A study was conducted at the clinic of infectious diseases Kharkiv National Medical University. The study involved 18 patients with CHC. The median age was 34 ± 4,2 years, women - 10 (55.6%) men - 8 (44.4%). The diagnosis was established on the basis of generally accepted clinical, anamnesis and laboratory data. Liver sonoelastography with an Ultrasound Diagnostic Scanner Hitachi Hi vision Avius 2013 (Japan) and FibroTest (Biopredictive, France) was performed. Liver fibrosis stage was determined by the scale METAVIR.

The results. According to the liver Sonoelastography results in patients with CHC are defined stages of fibrosis: F0-F1 - 10 (55.6%); F1-F2 - 5 (27.8%); F2-F3 - 1 (5.6%); F3-F4 - 2 (11.1%). When we compared data of Sonoelastography and FibroTest agreement between the results found in 16 (88.9%) patients: F0-F1 - 10 (55.6%); F1-F2 - 5 (27.7%); F3-F4 - 1 (5.6%). Two (11.1%) patients had different results of Sonoelastography and FibroTest, in both cases, the results of FibroTest was determined by a higher stage of fibrosis.

Conclusion. The results of determining the stage of liver fibrosis in patients with CHC using Sonoelastography and FibroTest match in 88.9% of cases.