



Objective is to develop an optimal scheme of treatment of AH in combination with NAFLD based on the study of polymorphism of AGTR1 (A1166C) gene.

Material and methods. 90 patients with AH combined with NAFLD is to be examined. Control group of 20 healthy individuals will be included. It will be used subjective (complaints, history of disease and life) and objective methods (inspection, palpation, percussion, auscultation, measurement of blood pressure), anthropometric indices – BMI for the study. Clinical and laboratory research involves study of such indicators, as standard biochemical methods determined by the concentration of total cholesterol, triglycerides and cholesterol HDL and LDL, the activity of hepatic transaminases, alkaline phosphatase content of the serum blood bilirubin. Insulin resistance determined by HOMA modelling. Clinical and instrumental examination for determination of structural changes in the liver and heart sonography will be conducted by these authorities; clinical and instrumental examination by Doppler echocardiography - the regime will be held to all thematic patients, as well as daily monitoring of blood pressure; cuff test and velocity of pulse waves. To determine allelic polymorphism AGTR1 (A1166C) gene the molecular-genetic testing (polymerase chain reaction) will be conducted.

Conclusion. The progress of AH in patients with NAFLD, determine the influence of activity of the pathological process in liver at cardiac haemodynamic indicators will be examined. The impact of AGTR1 (A1166C) gene polymorphism will be analyzed in hypertensive patients with NAFLD. We will determine risk groups depending on the genotypes of polymorphic markers AGTR1 gene with most unfavourable course of AH in combination with NAFLD. Also, an optimal algorithm for the treatment of AH in patients with NAFLD considering the identified violations and depending on the polymorphism of the AGTR1 (A1166C) gene will be developed. These will provide the opportunity to increase the efficiency of treatment to reduce the risk of manifestation and progression of disease.

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THE COMPLEMENT SYSTEM IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND CHRONIC PANCREATITIS

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The purpose. The aim of presented study was to examine the state of non-specific immunity in patients with combined course of COPD and chronic pancreatitis (CP).

Materials and Methods. Were examined 87 patients (62 individuals with COPD in combination with CP and 25 – with an isolated course of COPD). Standard values obtained when examining 20 healthy persons of similar age and gender. The state of the complement system was evaluated by the determining of content of its components C3 and C5, and the total amount of complement by the method of 50%



hemolysis with recalculation on a standard schedule. Statistical analysis was performed using licensed programs «Microsoft Excel» and «Statistica 6.0».

Results. The study showed that in patients with isolated COPD C3 quantity was $0,95 \pm 0,02$ mg/l at a normal rate of $1,4 \pm 0,04$ mg/l and the level of complement C5 - $53,9 \pm 2,4$ mg/l with the control - $64,7 \pm 3,2$ mg/l. The total value of the components also did not reach the control values ($75,4 \pm 3,8$ U/l) was $61,8 \pm 3,5$ U/l. In patients with combined course of COPD and CP C3 level was increased to $2,97 \pm 0,2$ mg/l and C5 - to $72,4 \pm 3,1$ mg/l, and the total complement activity to $82,2 \pm 4,9$ U/l.

Conclusions. Combined course of COPD and CP leads to the activation of the complement system, which can be regarded as one of the factors of the development of autoimmune processes. These changes may contribute to prolongation of acute stage and prevent the formation of a complete remission, which can lead to the complications development.

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THE FEATURES OF CHANGES OF FIBROSIS INDEXES IN PATIENTS WITH NONALCOHOLIC STEATOHEPATITIS

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The purpose - to determine the characteristics of biochemical markers of fibrogenesis in the liver of patients with nonalcoholic steatohepatitis (NASH).

Materials and methods. 45 patients (17 men and 28 women) with NAFLD were examined. The average age of the patients was $52,5 \pm 2,1$ years. The patients were randomized into 2 groups: group 1 (comparative group) - with nonalcoholic steatosis (NAS) and group 2 - with NASH. FibroMax test was performed, which comprises 5 biochemical indices of blood serum, including alpha 2-macroglobulin, haptoglobin, apolipoprotein A1, gamma-glutamyl transpeptidase (GGT), total bilirubin, alanine aminotransferase (ALT), aspartate aminotransferase (AST), glucose, triglycerides (TG), and total cholesterol. Fibrosis and the level of activity of the inflammatory process in the liver were calculated based on the age and sex of the patient.

Results. Patients of group 2 had significantly increased ALT level - 2.5 times in 62.3% of patients and increased AST - 2.3 times in 48.5% of patients ($p < 0.05$), whereas these indices in patients with NAS were elevated 1.8 times in 38% of patients and 1.6 times in 27.5% of patients respectively ($p < 0.05$). GGT increased 1.2 times in 24.5% of patients and alkaline phosphatase (AP) - 1.1 times in 16.2% ($p < 0,05$) of patients with NASH. Hyperbilirubinemia (1.2 fold increase, $p < 0,05$) was determined in 12% of patients. The ratio of AST / ALT levels was higher in patients with NASH and compounded $0,88 \pm 0,3$ ($p < 0.05$), HOMA IR index was $4,7 \pm 2,1$, which is 1.2 times higher than in patients of the 1st group ($p < 0.05$). Blood lipid disorders were characterized by growth in serum total cholesterol level by 1.4 fold in 47.2% of patients with NASH ($p < 0.05$), while hypertriglyceridemia prevailed in patients with NAS - TG level increased 2.1 times in 62.1% of patients ($p < 0.05$).