



relationship between level of fasting glucose and anisotropy degree of the red blood cells suspension of patients of CHF and DM.

Thus, methods of the laser polarimetry of the EM may be used for early diagnosis of structural changes of erythrocytes in patients with CHF and DM.

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**EFFECT OF L-ARGININE ASPARTATE IN COMPLEX TREATMENT OF PATIENTS WITH CHRONIC CHOLECYSTITIS AND HYPOTHYROIDISM.**

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It is known that changes in homeostasis in tissues sensitive to thyroid hormones include carbohydrate, fat and protein metabolism. In the presence of hypothyroidism in persons suffering from chronic cholecystitis, due to the formation of the syndrome of mutual burden, long course of exacerbation of chronic inflammatory pathology of the gallbladder is observed frequently. Various researchers have shown that patients with hepatobiliary dysfunction and hypothyroidism have an increase in cholestatic enzymes in the blood. Antihypoxic, membrane-stabilizing, cytoprotective, antioxidant, detoxifying activity of L-arginine aspartate are investigated. It also manifests itself as an active regulator of intermediate metabolism and energy supply processes, which are important properties that will be useful for patients with combined pathology of the thyroid gland and gallbladder.

The objective of the study was to investigate the effect of L-arginine aspartate on certain biochemical parameters of blood as a result of complex treatment of patients with chronic cholecystitis and hypothyroidism. 36 patients with hypothyroidism and concomitant chronic cholecystitis were examined. The examined patients were divided into two groups: the main group included 20 patients who, together with the standard treatment of hypothyroidism and chronic cholecystitis, were additionally prescribed a solution of L-arginine aspartate for oral use 5.0 ml 3 times a day with meals for 14 days. The comparison group consisted of 16 patients, representative by age and sex to the main group. The control group included 20 healthy people. The average age of patients in the main group was  $50.4 \pm 3.1$  years, the comparison group -  $49.4 \pm 2.9$  years, the control group -  $40.1 \pm 2.9$  years. Blood was taken twice from the ulnar vein: before treatment and two weeks after it was started. As an anticoagulant used 5% solution of ethylenediaminetetraacetate disodium salt. Biochemical blood tests were performed on a biochemical analyzer "Accent-200" ("Cormay S.A.", Poland) using standard reagents and methods. The indicators of the biochemical study of blood that were studied included: total bilirubin and its fractions, uric acid, total protein and albumin, urea and creatinine, activity of aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase,  $\gamma$ -glutamyltranspeptidase.

It was found that the improvement of the overall therapeutic effect from the additional course of the L-arginine aspartate was observed in all patients of the main group. This manifested itself in an earlier improvement in well-being, a decrease in the intensity of pain and heaviness in the right hypochondrium, nausea and bitterness in the mouth, headache and general weakness.

In particular, in such patients, who used L-arginine aspartate during two weeks of treatment significantly decreased the activity of alanine aminotransferase by 36.0% ( $p=0.02$ ), total lactate dehydrogenase - by 15.4% ( $p=0.03$ ) and  $\gamma$ -glutamyltranspeptidase-by 30.3% ( $p=0.03$ ), compared with those before treatment. For full correction of clinical manifestations of the disease and biochemical changes 14-day use of L-arginine aspartate is not enough, which requires repeated courses of the chosen treatment regimen until complete remission in the outpatient treatment.

Thus, it was found that additional to the main treatment regimen of L-arginine aspartate contributed to faster regression of clinical manifestations of chronic cholecystitis in patients with hypothyroidism, which occurred against the background of normalization of biochemical markers of cytolytic and cholestatic syndromes.