



обміну, то уміст загальних ліпідів і загального холестерину на фоні введення тваринам дексаметазону вірогідно зросли у тварин обох вікових груп. Слід зазначити, що у плазмі крові 18-місячних шурів показники вмісту загальних ліпідів і загального холестерину були вищими (на 36,5 і 83,3% відповідно при порівнянні з контрольною групою тварин зазначеного віку), у той час як у 3-місячних діабетичних тварин лише на 26,7 і 58% відповідно перевищували показники тварин контрольної групи. Окрім того, у діабетичних шурів обох вікових груп відзначалося вірогідне, порівняно з показниками відповідної за віком контрольної групи тварин, зниження умісту холестерину ЛПВЩ: на 65% у 18-місячних та на 63,7% у 3-місячних шурів.

Отже, дексаметазоновий діабет у шурів різних вікових груп супроводжується суттєвими порушеннями ліпідного обміну, що супроводжується зростанням у плазмі крові вмісту загальних ліпідів і загального холестерину та зниженням умісту холестеролу ЛПВЩ. Двотижневе введення дексаметазону 18-місячним шурям викликає суттєвіші, ніж у 3-місячних тварин, зміни досліджуваних показників ліпідного обміну.

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АКТУАЛЬНІ ПИТАННЯ В КЛІНІЦІ ВНУТРІШНІХ ХВОРОБ

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THE INFLUENCE OF HEPARHIZINE ON THE EXTRACELLULAR MATRIX COMPONENTS CONDITION AND THE INTENSITY OF FIBROUS FORMATION IN THE LIVER IN PATIENTS WITH NON-ALCOHOLIC STEATOHEPATITIS THAT COMORBID WITH CHRONIC KIDNEY DISEASE

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Aim of the research was to find out the features of liver fibrosis biochemical markers with non-alcoholic steatohepatitis in patients with obesity stages I-II and chronic kidney disease stages I-III, to establish the effectiveness of Heparhizine influence on the state of carbohydrate-protein components of the connective tissue of the liver and kidneys extracellular matrix.

Material and methods of the research: 98 patients with non-alcoholic steatohepatitis on the background of obesity stages I-II were examined: 52 patients with non-alcoholic steatohepatitis (1st group) (without accompanying chronic kidney disease), 46 patients with non-alcoholic steatohepatitis with a comorbid chronic kidney disease stages I-III (2nd group). The control group consisted of 20 practically healthy persons (PIIPs) with the corresponding age and sex. Biopsy of the liver was performed on 32 patients with non-alcoholic steatohepatitis with the accompanying of chronic kidney disease stages I-III, 28 patients with non-alcoholic steatohepatitis without chronic kidney disease. Patients of both groups with non-alcoholic steatohepatitis received Heparhizine treatment (Glycyrrhizin 40 mg, Glycine 400 mg, L-cysteine hydrochloride 20 mg) (Valartin Pharma) by intravenous administration of 20 ml of the drug for 10 days followed by enteral administration of 2 tablets of Heparhizine (1 tablet: Glycyrrhizin 25 mg, Glycine - 25 mg, Methionine - 25 mg) 3 times a day for 80 days. Patients with non-alcoholic steatohepatitis with a comorbid flow of non-alcoholic steatohepatitis, obesity and chronic kidney disease stages I-III, except Heparhizine, received baseline therapy of chronic kidney disease stages I-III: chronic pyelonephritis (course of antibacterial drugs, uroseptics, Canephron). The examinations were carried out before the treatment and on the 90th day of treatment.

The study showed that in the case of non-alcoholic steatohepatitis that develops on the background of obesity and chronic kidney disease stages I-III, the presence of fibrotic changes in the liver tissue was established, which according to the biochemical index of fibrosis, exceeds in those patients with non-alcoholic steatohepatitis without comorbidity with kidney pathology. In patients with non-alcoholic steatohepatitis, which was accompanied by obesity, a significant increase in the synthesis of collagen and glycosaminoglycans which was accompanied by an ineffective resorption of newly formed collagen due to inhibition of the collagenolytic activity of blood plasma, due to significant activation of proteinase inhibitors ($\alpha 2$ -MG) was observed with a significant imbalance in the system of connective tissue metabolism. Under the conditions of the comorbidity of non-alcoholic steatohepatitis with chronic kidney disease stages I-III, collagen synthesis and resorption are activated, but the anabolism processes predominate, in spite of the compensatory activation of collagenolysis, with a substantial hyperproduction of actinic-phase proteins, fibronectin, glycosaminoglycans, fibroblast growth factor and lead to progressive fibrosis of the liver and disturbance of its functions.

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INDICATOR VALUES OF IMMUNE INFLAMMATION IN PATIENTS WITH DIABETIC NEPHROPATHY AND CONCOMITANT OBESITY

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The pathogenesis of diabetes type 2 and obesity are influenced by different genetic factors, disorders of the immune balance and lifestyle factors. The impact of these pathological processes increases the risk of vascular complications and causes significant social and economic problems. The negative trend requires a detailed examination of all possible causes of chronic inflammation, which is one of the key reasons for the progression of the kidney failure.



The objective of the study is the indicators interleukin-1 (IL-1), interleukin-6 (IL-6), and transforming growth factor- β 1 (TGF β 1) in patients with diabetic nephropathy (DN) and obesity.

For the study, 43 patients were selected with diabetes type 2 from 41 to 63 years old with the duration of the disease at least 10 years. Glomerular filtration rate (GFR) in all patients was not less than 90 ml/min. All patients were divided into two groups: group 1 included patients with DN stage III without concomitant obesity (22 people), the 2nd group included patients DN stage III and 1-degree obesity (21 people). The control group consisted of 22 healthy people. Exclusion criteria were: courses of antibiotic therapy of any duration during the last 4 weeks, cancer. In addition to general clinical methods of examination, all patients underwent determination of levels of IL-1 and IL-6, TGF β 1.

Analysis of clinical and laboratory rates, which were examined in patients, showed the increasing level of IL-1, IL-6, and TGF β 1 compared with those rates, that were seen in healthy people ($p < 0,05$). The proinflammatory cytokines levels were higher in patients with concomitant obesity.

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COMPARATIVE CHARACTERISTICS OF COMBINED DRUGS IN TREATMENT OF ARTERIAL HYPERTENSION

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The problem of arterial hypertension treatment is an important problem in modern cardiology, despite a large number of antihypertensives in the domestic pharmaceutical market. First of all, the main difficulties are connected with the insufficient solvency of citizens. On the other hand, most patients require several groups of hypotensive drugs, which create some inconvenience in taking.

The aim of the research was to study the clinical efficacy and disposition of patients to combined drugs – angiotensin II receptor blockers and calcium channel blocker in a comparative aspect with an angiotensin-converting enzyme (ACE) blocker and calcium channel blocker in patients with arterial hypertension.

60 patients with arterial hypertension in the second stage were examined. The age of the investigated persons was 64.3 ± 5.17 years. The examination was performed on the first visit and after 14 days of treatment. All patients took aspirin 100 mg per day, atorvastatin 10 mg per day and were divided into two groups depending on the combined drug. The first group of the subjects (32 patients) consisted of patients taking the combination of lisinopril 10 mg and amlodipine 5 mg once a day, the second - (28 persons) were patients who were prescribed valsartan 160 mg with amlodipine 5 mg once a day. Daily monitoring of blood pressure and ECG was carried out in all patients.

The prescribed treatment led to regression of clinical manifestations such as reduction of a headache, dizziness, pain in the area of the heart, shortness of breath in both groups of patients. The achievement of the target level of systolic blood pressure (SBP) was noted in 74.9% (first group) and 70.52% (second group), diastolic blood pressure - 95% and 92% respectively. Reduction of the average daily SAT in the first group was 28.21%, but in the second one it was 23.81% and the time index decreased 48.23% in the group with the ACE inhibitor in combination and 44.2% in the case with valsartan. These changes indicated a decrease in hypertension loading. It should be noted that hypotensive effect was pronounced more intensively in the first group, providing lisinopril use, but without veritable difference between groups. When analyzing pharmaeconomic peculiarities of the above- mentioned combined preparations the advantage of the last ones in comparison with separate intake of the similar drugs was marked. The data are a powerful argument for the greater disposition of the domestic patients to a combination with ACE inhibitor.

Patients with combinations of lisinopril-amlodipine and valsartan-amlodipine achieved a similar hypotensive effect. And the fixed combination of drugs increases the disposition to the treatment of patients with arterial hypertension due to pharmaeconomic benefits and its simple use.

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COMBINED USE OF BETA-BLOCKERS AND METFORMIN IN PATIENTS WITH ARTERIAL HYPERTENSION

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Treatment for arterial hypertension requires correction of the base-line drugs in patients with metabolic syndrome. In particular, long-term use of beta-blockers can lead to disturbances of glucose tolerance and lipid metabolism.

The aim of the study was to evaluate the efficacy of the combination of bisoprolol and metformin in patients with hypertension against a background of diabetes mellitus and increased body weight.

We examined 48 patients with arterial hypertension II degree, with latent and mild diabetes mellitus (glycosylated hemoglobin (HbA1) - 6.63 ± 0.34) and an increased body mass index (BMI) of 28.39 ± 0.45 kg / m². Patients of the control group took bisoprolol, lisinopril, acetylsalicylic acid, and atorvastatin. In the research group, patients were additionally prescribed metformin 500 mg in the morning after eating for 6 months.

It was found that BMI did not change substantially during the studied period, while there was an unlikely increase in HbA1 in the control group of patients. At the same time, an additional administration of small doses of