The objective of the study is the indicators interleukin-1 (IL-1), interleukin-6 (IL-6), and transforming growth factor-β1 (TGF β1) 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 I 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 β1.

Analysis of clinical and laboratory rates, which were examined in patients, showed the increasing level of IL-1, IL-6, and TGF β1 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 dispotion 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 pharmacoeconomic 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

metformin led to a significant regression 15% HbA1 - "diabetes mirror" and 17% BMI ($p < 0.05$). At the same time the correction of the previously mentioned risk factors of arterial hypertension resulted in more significant decrease of arterial blood pressure level and doses of the base-line preparations in the main group.

Thus, it is expedient to prescribe small doses of metformin, which improves glucose tolerance, helps to normalize body weight and optimizes standard antihypertensive therapy to the patients with arterial hypertension against a background of latent and mild diabetes mellitus and increased body weight.

Dudka I.V.

DEVELOPMENT OF GASTROESOPHAGEAL REFLUX IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE: THE ROLE OF HEMOSTASIS SYSTEM

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Gastroesophageal reflux disease (GERD) and chronic obstructive pulmonary disease (COPD) are common pathological conditions that occur combined in 25-60% of cases. Patients with GERD often have lung «masks» – cough, nocturnal dyspnea, bronchial hyperreactivity, bronchospasm and laryngospasm. Symptoms of GERD in 4-10% of the population are observed every day, in 20-30% every week and in 50% every month. In COPD, due to hypoxia, accumulation of free radicals in the systemic circulation that promote the release of biologically active substances, an increase of overall blood coagulation capacity is observed, which is compensated by an increased activity of non-enzymatic fibrinolytic activity (NEFA). Objective of the investigation was to find the probable mechanisms of progression of GERD on the background of COPD by studying the various stages of blood coagulation. To achieve this aim the study involved 32 patients with COPD, the group B, (GOLD 2), including: 8 – without comorbidity (1st group), 8 – with accompanying endoscopically negative (EN) GERD (2nd group), 8 – with accompanying endoscopically positive non-erosive (EPN) GERD (3rd group), 8 – with accompanying endoscopically positive erosive (EPE) GERD (4th group). The control group consisted of 10 practically healthy persons (PHP) of the corresponding age and sex.

The analysis of results of studying the 2nd phase of coagulation hemostasis showed that PTT was significantly reduced in all observation groups. The maximum similar decline in the indices was observed in patients of groups 3 and 4 – by 39.5% compared to the index in the PHP ($p < 0.05$) in the absence of intergroup differences; in patients of group 1 PTT decreased by 19.5% compared with those in PHP; and in patients of group 2 there was a decrease of PTT by 30.9% ($p < 0.05$). Studying the 3rd phase of coagulation hemostasis considering the content of fibrinogen in the blood suggests that in patients of all observation groups this figure was significantly reduced: in patients of the 1st group – by 11.0%, group 2 – by 17.5%, groups 3 and 4 – by 26.6% ($r_{1-4} < 0.05$). While analyzing the blood anticoagulant potential we found a reduction in TT in all groups of patients with the highest percentage of decline in the patients of group 4 – by 37.6% ($p < 0.05$) compared with group of PHP, but in the patients of group 1 TT decreased reliably by 21.8% too, in group 2 by28.2% and in the 3rd group by 31.2% (r1-4 <0.05) with the reliable difference between groups 1, 2, 3 and group 4. AT III activity in the patients of group 4 was reduced relative to the standards by 27.1%, that is, it had the minimum value, while the patients of group 1 showed a decrease in the activity of AT III by 16.4%, group 2 – by 22.3% and group 3 by 24.9% (r1-4 <0.05) with the absence of intergroup differences. Analysis of the blood fibrinolytic activity showed that the TFA of plasma in patients of all groups is reliably lower than the benchmarks: in group 1 by 13.5%, group 2 by12.4%, group 3 by17 6% and in the 4th group by 19.4% (r1-4 <0.05) with the presence of reliable intergroup difference ($p < 0.05$). The findings of the study of coagulation hemostatic factors, anticoagulant and fibrinolytic systems in patients with COPD accompanied by GERD indicate the development of hypercoagulation syndrome, which deepens with increasing severity of GERD. Thus, reliable factors of occurrence and progression of endoscopically positive GERD in patients with COPD are reduced activity of antithrombin III below 70%; reduced enzyme fibrinolytic activity by more than 45% from the proper ones; reduced activity of Hageman dependent fibrinolysis by more than 55% from the proper ones. Plasma hypercoagulation (activation of the 2nd and 3rd phases), reduced anticoagulant potential of blood (of antithrombin III, XIII factor) inhibition of total fibrinolytic activity of plasma due to inhibition of enzymatic, Hagemann-dependent fibrinolysis, a compensatory increase in the activity of non-enzymatic fibrinolysis, the growth of proteolytic activity of plasma that deepens with increasing severity of bronchial obstruction syndrome (FEV_1), promote the development of positive endoscopic erosive GERD.

Dudka T.V.

CHOLINERGIC DISBALANCE IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND CHRONIC ACALCULOUS CHOLECYSTITIS

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Chronic obstructive pulmonary disease is one of the most spread diseases affecting people of all ages. Combination of chronic obstructive pulmonary disease with gastro-intestinal pathology is one of the most frequent polymorbidity. There are different evidences indicating a combined course of COPD with gastro-intestinal diseases in 8-50% of cases. The combination of chronic cholecystitis, chronic bronchitis and other bronchial obstructive diseases appears to be found in more than 20-25% of individuals.