which is a diagnostic criterion for axon damage, and to determine the rate of excitation by motor fibers of the extremities' distal nerves. Slow rate of excitation is observed in the demyelination of nerve fibers. The amplitude of the M-response was determined and the excitation rate with the motor fibers n. medianus; n. ulnaris; n. tibialis, n. peroneus was measured in patients with DPN. Patients with a duration of DM up to 1 year showed a decrease in the rate of excitation on the motor fibers n. medianus by 13.8% compared with the control, which indicates a decrease in nerve conduction due to the predominant lesion of the myelin sheath. The excitation rate of the motor fibers of a median nerve progressively decreases, depending on duration of the DM. Thus, in patients with duration of DM up to 10 years, the rate of excitation decreased by 20%, and in patients with duration of DM more than 10 years, there was a decrease in the rate of excitation on motor fibers n. medianus by 33.2% compared to control. Analysis on the indicators obtained in the study of the tibial nerve, revealed a probable decrease in the excitation rate of the motor fibers n. tibialis by 19.9% in patients with duration of DM up to 1 year compared with control. In patients with duration of DM up to 10 years the rate of excitation of the motor fibers n. tibialis decreased by 25.8%, and in patients with duration of DM more than 10 years - by 31.1% ($p<0.05$).

Decrease in the excitation rate by motor fibers of a tibial nerve is already revealed in patients with DPN and duration of DM less than 1 year. Progression of DPN is followed by further decrease in the excitation rate. Furthermore, DPN affects more nerves of the lower extremities compared to the upper.

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THE LIPID PROFILE FEATURES IN PATIENTS WITH METABOLIC SYNDROME IN COMBINATION WITH HYPOTHYROIDISM

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Metabolic syndrome (MS) is one of the priority problems in medicine and leads to negative social and medical consequences. Subclinical thyroid dysfunction can lead to the formation of MS components. Thyroid stimulating hormone (TSH) is definitely among the new contenders for the role of the component of MS.

The purpose of the study was to identify the lipid profile features in patients with MS in combination with hypothyroidism. 21 patients with MS with hypothyroidism (9 men and 12 women), aged 45 to 60 years were examined. The duration of the disease is 5.68 ± 5.23 years. All patients received basic therapy, the control group consisted of 20 healthy donors. All the main components of MS are closely related to the functional state of the thyroid gland. In addition to the active effect on energy balance, lipid and carbohydrate metabolism, body weight, thyroid hormones also affect the state of the cardiovascular system, including blood pressure (BP). According to many epidemiological studies (Whickham Survay, National Health and Nutrition Examination Survey (NHALES-111) thyroid dysfunction is quite common in the population. Diseases of the hepatobiliary system occupy about 40% of the pathology of the digestive system. Such patients make up about 20% and occupy one of the leading places in the structure of disability. Dyslipidemia is a risk factor for cardiovascular pathology in general, and hypothyroidism pathogenetically contributes to its development. Therefore, it is important for doctors to make every effort to detect the first manifestations of MS in time and take measures to correct it. Patients underwent general clinical and biochemical studies to determine the main indicators of carbohydrate, lipid, protein and mineral metabolism, determined the levels of thyroid hormones. Ultrasound of the thyroid gland, liver, gallbladder, pancreas was performed. MS was diagnosed according to the recommendations of the International Diabetes Federation (2005). To assess the lipid spectrum of the blood, the content of total cholesterol (CTC) and triglycerides (TG) was determined using standard test systems from OlvexDiagnosticum by the enzymatic method on an autoanalyzer. Statistical analysis of the study results was performed on a personal computer using the program "Statistics for Windows".

Manifestations of dyslipidemia were noted in all patients with MS. The patients' features with MS and hypothyroidism were found to be the most proatherogenic changes in the lipid profile, namely the increase in levels of total cholesterol and LDL cholesterol ($p < 0.05$), which is not a typical manifestation of dyslipidemia for patients with MS, which is usually characterized by elevated triglycerides (TG) and lowering high-density lipoprotein cholesterol (HDL cholesterol). The majority of patients (93%) were found to have higher than normal values of total cholesterol and LDL cholesterol, while hypertriglyceridemia and decreased levels of HDL cholesterol were observed in less than half of patients ($p < 0.05$), indicating adverse atherogenic potential. people with MS and hypothyroidism. That is, hypothyroidism through the formation of atherogenic dyslipidemia significantly contributes to the progression of atherosclerosis and is one of the most significant risk factors for cardiovascular disease.

The lipid profile in patients with MS and hypothyroidism is characterized by the largest atherogenic changes, namely elevated levels of total cholesterol and low-density lipoprotein cholesterol, which are found in 93% of patients, respectively, while the classic manifestations of dyslipidemia in MS, hypertriglycerol, were diagnosed in less than half of patients (46%).

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RELATIONSHIP BETWEEN AMYLINEMIA LEVEL AND KIDNEY FUNCTION IN PATIENTS WITH DIABETES MELLITUS AND CHRONIC KIDNEY DISEASE

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Together with insulin, β-cells of the islets of Langerhans produce another hormone - amylin or islet amyloid polypeptide. In numerous studies, amylin deposits have been found in kidneys of patients with type 2 diabetes mellitus (T2DM), as well as in brain tissue with the development of dementia disorders.

The aim of the study was to determine the correlation between amylinemia and renal function in patients with diabetes mellitus (DM) and chronic kidney disease (CKD). 145 patients with DM and CKD who were treated at the Chernivtsi Regional Endocrinology Center were examined (average age of patients - 45.5±1.3 years; men - 71, women - 74; diabetic history - 11.7±5.5 years). Patients were divided into groups depending on the glomerular filtration rate (GFR): G1-G4, as well as by category of albuminuria - A1-A3. Diagnosis of diabetes was established according to the recommendations of the American Diabetes Association, the diagnosis of latent autoimmune diabetes in adults (LADA) - according to the recommendations of the Immunology of Diabetes Society, GFR was determined by the formula CKD-EPI according to the recommendations of KDIGO. The amylin content was determined by enzyme-linked immunosorbent assay using Elabscience kits (normal values 4.0-25.0 pmol/l). The category of albuminuria was determined by the indicators of microalbuminuria (MAU) and the albumin-creatinine ratio (ACR) in the urine using sets of OO NPL "Granum" (Ukraine).

The amylinemia rate in patients with CKD and diabetes in G3a group was 7.7 times higher than in the control ($p<0.05$) and 3.7 times higher than in the G1 group ($p<0.05$), but was lower than in the G4 group 3.4 times ($p<0.01$). Analyzing the G3b group, we found that compared to the control, the above indicator was 14.7 times higher ($p<0.01$), it also increased 7.2 times relative to the G2 group ($p<0.01$) and 1.9 times relative to G3a ($p<0.01$). Serum amylin in the G4 group was significantly 26 times higher than in the control ($p<0.01$), 12.7 times higher compared to G1 ($p<0.01$), 6.1 times relative to G2 ($p<0.01$), 3.4 times - relative to G3a ($p<0.01$). In groups G1 and G2 no significant difference between amylin levels was found compared to the control. Regarding the dependence of amylin levels on the degree of albuminuria, the following trends were found: the lowest rate was recorded in patients of category A1 – it was higher than that in group A3 2.9 times ($p<0.05$); in patients with albuminuria A2 category amylin increased 9 times compared with the control group ($p<0,01$) and in A3 - 19 times compared with the control ($p<0,01$). In other cases, no significant difference was found between the indicators. In patients with CKD and diabetes, there are probable positive correlations of medium strength between the content of amylin and insulin, C-