Pashkovska N.V. PECULIARITIES OF AMYLINEMIA DEPENDING ON THE TYPE OF DIABETES MELLITUS

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-cell dysfunction in combination with insulin resistance are key causes for type 2 diabetes mellitus (T2DM). However, in addition to insulin, pancreatic islet cells produce another hormone, amylin, the physiological role of which is widely discussed by scientists.

The aim of the study was to determine the level of amylinemia in different types of diabetes. 145 patients with diabetes mellitus (DM) and chronic kidney disease 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 type of diabetes: the first group consisted of 40 patients with classical type 1 diabetes mellitus (T1DM), the second - 70 people with latent autoimmune diabetes in adults (LADA), the third - 35 patients with classical type 2 diabetes mellitus (T2DM). Diagnosis of diabetes was established in accordance with the recommendations of the American Diabetes Association (ADA, 2021), the diagnosis of LADA, in accordance with the recommendations of the Immunology of Diabetes Society (2005). All patients underwent general clinical studies, determination of the main indicators of carbohydrate metabolism (glucose onset, C-peptide, insulin, HOMA-IR index). The amylin content was determined by enzyme-linked immunosorbent assay using Elabscience kits (normal values 4.0-25.0 pmol/l).

In classical T1DM amylin levels did not exceed normal values and did not undergo statistically significant changes with the control group, while in patients with classical T2DM it was 10.8 times higher than in control (p<0.01) and 8.3 times higher than the group of patients with classical T1DM respectively (p<0,01). In the LADA group, the content of amylin in the blood serum was 9 times higher (p<0.01) compared to the control group and 6.8 times higher than in the case of classical T1DM respectively (p<0.01), at the same time was lower by 17.3% than in the T2DM group (p<0.05). In patients with DM a direct probable correlation was observed between amylin and C-peptide, HOMA-IR index (p<0.05), which confirms the relationship between increased amylin and insulin synthesis in this category of patients. In patients with LADA, there was an interrelationship between the content of amylin and insulin, C-peptide, HOMA-IR index (p<0.05), which indicates the role of insulin resistance as well as the hyperamilinemia caused by it in the development and progression of this diabetes subtype. On the other hand, in classical T1DM no probable correlation between the indicators was found.

The level of amylin in classical type 2 DM and latent autoimmune diabetes in adults differs sharply from that in classical type 1 DM and is associated with the degree of insulin resistance, which indicates its role in the development of metabolic disorders in this category of patients.

Pavlovych L.B. NDUCTIVITY INDICATORS IN PAT

NERVOUS CONDUCTIVITY INDICATORS IN PATIENTS WITH DIABETIC POLYNEYROPATHY DEPENDING ON THE DURATION OF DIABETES MELLITUS

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The most informative method of diagnosing lesions of the peripheral nervous system in patients with diabetic polyneuropathy (DPN) is electroneuromyography examination, i.e. registration of fluctuations in electrical potentials in skeletal muscle, which allows you to objectively examine the state of damage to the peripheral neuromotor system. Thus, using this method, the frequency of lesion detection of peripheral nerve function increases up to 70-90%.

48 patients with diabetes mellitus (DM) were examined (32 women -66.7% and 16 men -33.3%) at the age of 45-60 years (average age -52.5 years). Stimulation electroneuromyography (ENMG) was performed on a Neuro-MVP device. ENMG was used to assess the maximum amplitude parameters of the motor M-response peculiar to the extremities muscles, the reduction of