МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

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Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

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Material and methods. Inclusion criteria: detection of SARS-CoV-2 RNA by polymerase chain reaction. The first group consisted of patients with type 2 DM diagnosed before infection with COVID-19. The second group consisted of patients without a diagnosis of DM before SARS-CoV-2 infection (practically healthy). Exclusion criteria: presence of neoplasia, immunodeficiency or other concomitant infections. Ninety-six patients with a positive diagnosis of COVID-19 were studied. Only 30 people met the inclusion criteria considering the exclusion criteria. All 30 patients underwent 3- and 6-month follow-up: 10 patients without diabetes (type 2 diabetes) and 20 patients with diabetes. 10 non-DM patients (6 men and 4 women) with an average age of 62 years and 20 diabetic patients (12 men and 8 women) with the average age of 60.

Results. No difference was observed in inflammatory markers of infection in relation to the period of SARS-CoV-2 disease at hospitalization, hospital discharge and after hospitalization (90 and 180 days), such as neutrophil-to-lymphocyte ratio, lymphocyte, neutrophil, monocyte count, aspartate aminotransferase (ASAT), alanine aminotransferase (ALAT), C-reactive protein and coagulation biomarkers between patients with and without diabetes.

The next step is taking into account the results after 180 days to determine the long-term effects of COVID-19. As expected, an increase in fasting blood glucose was observed in the group of patients with diabetes compared to patients without diabetes. But in more than 20% (3 patients) without diabetes, reference fasting blood glucose levels were detected.

Further, the increase in glycated hemoglobin was verified in the group of patients with diabetes compared to the group of healthy people (without diabetes). However, 20% (5 patients) of the group without diabetes had elevated reference values for glycated hemoglobin.

In addition, C-peptide levels were similar between the group with and without diabetes. In both groups, C-peptide was within or above reference values.

Conclusions. SARS-CoV-2 infection can lead to a decrease in the function of pancreatic beta cells or even their destruction, which can lead to an exacerbation of diabetes, its onset or long-term metabolic changes. In the cohort, more than 20% of patients without diabetes and more than 85% of patients with diabetes had values above the reference range for fasting blood glucose. To confirm a long-term increase in blood glucose, a glycated hemoglobin test was performed and its changes were detected in the entire group of patients with diabetes and in more than 20% without diabetes.

Piddubna A.A.

STATE OF INDICATORS OF CELLULAR AND HUMORAL LINK OF IMMUNITY IN PATIENTS WITH GRAVES' DISEASE

Department of Clinical Immunology, Allergology and Endocrinology
Bukovinian State Medical University

Introduction. Epidemiological studies conducted in recent years have shown a wide distribution of the thyroid gland diseases. However, the insufficiently studied role of thyroid hormones in the implementation of the functional activity of cells of the immune system determined the relevance of studying the features of the course of inflammation against the background of thyrotoxicosis. The inflammatory process, which continues against the background of these changes, has certain peculiarities of formation and course. These changes are caused by a decrease in the functional activity of cells involved in the formation of an inflammatory response (Ilyinska I.F., 2020). It should be noted that the successful development of fundamental immune-endocrinology has largely clarified the mechanisms and regularities of the interaction of the endocrine and immune systems, and allowed us to determine the place and role of immunological factors in the pathogenesis of endocrine diseases. However, there still are many controversial and unresolved issues. Thus, the question of violations of non-specific and specific immune protection in the development of autoimmune diseases of the thyroid gland remains insufficiently studied today.

The aim of the study. Investigation of indicators of the cellular and humoral link of immunity in patients with Graves' disease.

Material and methods. 11 patients with Graves' disease and 17 practically healthy people, who made up the control group, were examined. The main group included patients with thyrotoxicosis without concomitant pathology. The age of the patients ranged from 18 to 72 years (on average, 46,4±2,7 years). All the patients at the time of admission to the hospital were in the stage of sub- and decompensation of diseases. The diagnosis of accidents, severity and compensation of diseases were established according to the degree of manifestation of clinical symptoms, given by additional methods, including hormonal studies. All groups of patients were compared by age, sex, duration and compensation of diseases. Thyroid-stimulating hormone (TSH), free thyroxine (fT4), free triiodothyronine (fT3) and antibodies to thyroid-stimulating hormone receptors (Ab rTSH) were determined by the chemiluminescent immunoassay method on the Cobase 411 analyzer. The study uses general clinical, immunological and statistical research methods using modern technologies.

Results. As a result of the study of the absolute and relative number of formed elements of blood in patients with Graves' disease, a probable decrease in the absolute number of leukocytes (by 36,7%) was established ($p<0,05$). A significant 2,27-fold decrease in the number of monocytes compared to the control group was revealed ($p<0,05$). The next stage was the study of subpopulations of lymphocytes in patients with Graves' disease. Thus, in the main group, there was a significantly pronounced deficiency of the absolute and relative number of the total number of T-lymphocytes (CD3+), T-helpers/inducers (CD4+) and T-suppressors of cytolytic lymphocytes (CD8+) in comparison with the control group ($p<0,05$). As a result of the study of indicators of the humoral link of immunity, it can be seen that the immunoglobulin secretory capacity of B-lymphocytes in relation to Ig A and Ig M is significantly reduced in patients with Graves' disease ($p<0,05$).

Conclusions. The patients with Graves' disease have a probable decrease in the total number of T-lymphocytes (CD3+), T-helpers/inducers (CD4+) and T-suppressor-cytolytic lymphocytes (CD8+) compared to practically healthy people ($p<0,05$), and the immunoglobulin secretory capacity of B-lymphocytes in relation to Ig A and Ig M also decreases ($p<0,05$), which can serve as a factor in the occurrence of dysbiotic disorders in the body.

Tsaryk I.O.

CHARACTERISTICS OF ANXIETY AND DEPRESSION INDICATORS IN PATIENTS WITH LATENT AUTOIMMUNE DIABETES IN ADULTS AND CHRONIC KIDNEY DISEASE COMPARED WITH CLASSICAL TYPES OF DIABETES

Department of Clinical Immunology, Allergology and Endocrinology
Bukovinian State Medical University

Introduction. It is known that patients with diabetes mellitus (DM), especially with chronic complications, are in the group of significantly increased risk of developing mental disorders, especially anxiety and depression, and majority of the researchers point to two-way connections between these conditions.

The aim of the study. To establish characteristics of emotional and personality disorders in patients with DM and CKD depending on the type of the underlying disease.

Material and methods. 145 patients with DM and CKD (71 men and 74 women aged 19 to 74) were included in the study. Patients were divided into three groups, two of which included 110 patients with type 1 DM (T1DM) – 40 with classical T1DM (17 men and 23 women aged 20 to 63 years) and 70 people with latent autoimmune diabetes in adults (LADA) (40 men and 30 women aged 35 to 67 years). The third group consisted of 35 patients with type 2 DM (T2DM) (15 men and 20 women aged 34 to 74). The control group included 25 practically healthy individuals (12 men and 13 women aged 23 to 69).

To assess personal and reactive anxiety the Spielberg-Khanin scale was used, which consisted of 40 questions, 20 of which characterized reactive anxiety (RA), the others – personal anxiety (PA).