

Statistical analysis of the obtained data was carried out using the Student's t-test and Pearson's rank correlation coefficient by means of the software package Statistica 6.0 for Windows. The difference was considered significant at $p < 0,05$.

Results. AT-TG level at the group of people with type 2 diabetes was 1,5 times higher than in the control group ($p < 0.05$).

The AT-TPO level was established to be 58,4% higher in the main group as compared with the group of healthy individuals ($p < 0.05$).

As a result of correlation analysis we have found positive correlations between the content of leptin and antithyroid antibodies levels, such as with AT-TG ($r = 0,593$, $p < 0.05$) and AT-TPO ($r = 0,462$, $p < 0, 05$).

Conclusions:

1. In patients with diabetes mellitus type 2 an antithyroid antibodies titers increase.
2. Elevation of antithyroid antibody titers in patients with diabetes mellitus type 2 is associated with the level of serum leptin.

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**IMMUNOLOGICAL ASPECTS
OF IMMUNE RECONSTITUTION
INFLAMMATORY SYNDROME IN
HIV-INFECTION**

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Introduction. The immune re-constitution inflammatory syndrome

(IRIS) in HIV-infected persons is a paradoxical reaction of immune system on opportunistic infections present in the host organism due to the abrupt restoration of T-cell immunity after the antiretroviral therapy (ART) initiating. Among the opportunistic infections that initiate the development of IRIS, the first place is occupied by tuberculosis (TB) infection.

Aim. To analyze and summarize data on immunopathogenesis of IRIS in response to the presence of mycobacterial infection in HIV-positive patients.

Materials and methods. Analysis and generalization of data from literature sources.

Results. It has been proven that IRIS develops mainly during the first 3 months after the start of ART. Predictors of IRIS development are 2 main factors: pronounced T-cell immunosuppression, persistence of opportunistic infection (OI) in the body (clinically manifested or latent).

If Mycobacteria tuberculosis (MBT) are present in the organism, a pronounced deficiency of CD4+ lymphocytes leads to uncontrolled reproduction of the pathogen and its accumulation in large quantities. In the period before ART initiating, macrophages phagocytose MBT, but are unable to destroy them due to the action of virulence factors. The accumulation of macrophages that contain the pathogen contributes to the creation of high concentrations of T-helper-activating cytokines, which, however, do not find their "target". If against this background ART is initi-

ated and the number of CD4⁺-lymphocytes increases rapidly due to it, then there is an excessive stimulation of their activity by cytokines secreted by infected macrophages. As a result, there is an overwhelming increase in concentration of T-helper-1 proinflammatory cytokines, such as IFN- γ , IL-2 and IL-12. The next chain is increased synthesis of proinflammatory IL-6 and TNF- α by macrophages which leads to the appearance of new or progression of existing pathomorphological and clinical manifestations of tuberculosis.

Thus, T-helpers play a key role in the pathogenesis of IRIS. However, there are probably additional factors that influence the formation of an excessive inflammatory response to TB infection. This opinion is prompted by the fact that in some patients IRIS develops before a significant increase in the number of T-lymphocytes in the peripheral blood. Such situations are thought to be associated with a local cell-mediated immune response involving CD4⁺-lymphocytes.

Conclusions. The immunopathogenesis of immune reconstitution inflammatory syndrome is based on a sharp increase in the number of T-helpers against the background of opportunistic infection in the body with subsequent excessive activation of macrophages and the synthesis of a large amount of pro-inflammatory cytokines with corresponding pathomorphological changes.

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ADVERSE REACTIONS TO DRUGS IN PATIENTS WITH COMORBID DISEASES MULTIDRUG-RESISTANT TUBERCULOSIS AND DIABETES MELLITUS

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Introduction

The problem of tuberculosis in patients with diabetes mellitus (DM) has received increasing attention in recent years. Increased interest is due, on the one hand, to an increase in the number of tuberculosis patients with multiple drug resistance of the pathogen, and on the other - a steady increase in the prevalence of diabetes in Europe.

Materials and methods. A retrospective analysis of 1687 medical records was carried out, that were listed in the registry database of Chernivtsi Regional Clinical TB Dispensary.

Results and discussion.

Having conducted a retrospective study, the polymorbidity of TB / DM was found in 6.6% of cases which slightly differs from the index that co-researchers had found, that was 6.3%. In the following diagram the frequency of comorbid TB / DM disease in Chernivtsi region is shown. The results rather indicate on increase in the proportion of diabetes mellitus in the population