

increases susceptibility to tuberculosis infection or reactivation of initially latent tuberculosis infection. Foreign authors point to the great role of cytokines in the pathogenesis of HIV infection. There are very few such studies in the combined pathology of HIV/TB in the domestic literature.

The aim of the work: is to perform comparative analysis of individual laboratory parameters of groups of patients with HIV combined with tuberculosis (TB) and TB monoinfection. A comprehensive immunological examination of 231 patients was performed, including 155 HIV-infected with active tuberculosis and 76 tuberculosis alone. The HIV/TB group was divided into 3 subgroups, depending on the time when the TB was joined to the HIV infection. CD4 + T-lymphocyte, CD8 + T-lymphocyte, CD4 +/CD8 + index, interleukin-4 (IL-4), interferon- (IFN-) and tumor necrosis factor- (TNF-) were compared with combined HIV/TB infection and patients with TB monoinfection. We established a significant difference between the CD4 + T lymphocyte indices, the CD4 +/CD8 + ratio in the associated HIV/TB infection, as well as in the 1st and 3rd subgroups of HIV/TB compared to the TB monoinfection patients, which was significantly higher. CD4 + T lymphocytes and higher CD4 +/CD8 + index in patients with TB monoinfection.

In the HIV/TB group, there was an average feedback force between the CD4 + T lymphocyte count and serum IFN- concentration (correlation coefficient $r = -0.36$, confidence level $P < 0.05$); weak feedback between CD4 + T lymphocyte count and serum TNF- concentration ($r = -0.29$, $P < 0.05$); a weak direct relationship between viral load level and serum IFN- concentration ($r = 0.25$, $P < 0.05$); the mean direct link between the viral load level and serum TNF- concentration ($r = 0.38$, $P < 0.05$); the mean strength was the inverse relationship between the number of CD4 + T lymphocytes and the level of viral load ($r = -0.44$, $P < 0.01$). In the group with TB monoinfection, no correlation was found between CD4 + T lymphocyte counts and cytokine parameters.

Thus, in the case of associated HIV/TB infection, CD4 + T lymphocyte indices, CD4 +/CD8 + ratios were significantly lower compared to patients with TB monoinfection. As HIV infection progresses (decrease in CD4 + T lymphocyte count and increase in HIV load), there is an increase in serum IFN- and TNF- content, which probably indicates a decrease in the number of anti-inflammatory T-regulatory cells, or a decrease in their suppressor cells. activity. The signs of progression of combined HIV/TB infection should be considered a rapid decrease in CD4 + T lymphocyte count, CD4 +/CD8 + ratio, an increase in HIV load, an increase in serum TNF- and IFN- content.

Perepichka .P.

A COMPREHENSIVE TREATMENT OF PATIENTS WITH ROSACEA CONSIDERING FUNCTIONAL CHANGES OF THE HEPATOBILIARY SYSTEM ORGANS

*Department of Dermatovenereology
Bukovinian State Medical University*

Improvement of the results of treatment of patients suffering from rosacea is a topical issue of modern dermatology. Rosacea is a common chronic dermatosis registered in different regions of Ukraine among 3-5% of the population. Clinical manifestation of rosacea is localized on the open skin areas – for example, the face. It possesses long chronic course, often resistant to standard therapy. All these factors are a cause of reduced ability-to-work and social activity of patients which stipulates the importance to increase the effect of treatment of such patients. Rosacea is known to be a poly-factor dermatosis. An important role in its pathogenesis belongs to disorders of the neuroendocrine regulation, vegetative dysfunctions, microcirculation changes, and functional disorders of the digestive organs, which should be taken into account in the treatment of such patients. Objective of the research was to increase the effect of treatment of patients with rosacea considering changes of the functional state of the hepatobiliary system organs. 37 patients aged from 28 to 69 years suffering from rosacea were examined including 26 women and 11 men. According to clinical signs on the skin 17 patients were diagnosed to have erythematous-teleangiectatic form of rosacea, and other 20 individuals – papulopustular form of dermatosis. Dermatitis lasted from 2 to 6 months in 11 patients, and the rest 26 patients – from 7 months to 1

year. The following methods of examination were used to determine functional state of the hepatobiliary system organs: instrumental (ultrasound examination of the abdominal organs), laboratory (biochemical, immune-enzymatic) and statistical. A comprehensive examination found that the majority of patients (26 – 70,3%) suffering from rosacea had changes in the hepatobiliary system organs (chronic cholecystitis and hepatitis), which were manifested by changes detected by the ultrasound examination of the liver and gallbladder, and changes in the content of cholesterol in the blood serum, lipid spectrum, activity of transaminase and alkali phosphatase. Considering the changes detected in the functional state of the hepatobiliary system organs and in order to improve the effect of rosacea treatment, a comprehensive therapy of 18 patients (the main group) was supplied with hepatoprotector containing silymarin. The rest 19 patients (the group of comparison) received standard therapy for dermatosis. According to clinical observations patients with rosacea from the main group who received a hepatoprotector containing silymarin in addition to the comprehensive treatment presented much earlier decrease of hyperemia and swelling (on an average 6-9 days earlier) and infiltration signs of dermatosis disappeared on an average 10-14 days earlier than in the patients from comparison group. When the treatment was over, the state of clinical recovery was registered among 13 (72.2%) patients with rosacea in the main group, considerable improvement – in 5 (27.8%) patients; and in the group of comparison among 10 (52,6%) and 9 (47,4%) individuals respectively. Thus, addition of a hepatoprotector containing silymarin to a comprehensive treatment of patients with rosacea and functional changes of the hepatobiliary system organs available promotes effect of treatment for such patients.

Semianiv I.O.

MANAGEMENT OF DIABETES MELLITUS-TUBERCULOSIS

*Department of Phthisiology and Pulmonology
Bukovinian State Medical University*

The association between diabetes mellitus (DM) and tuberculosis (TB) has been known for many years but studies in the last 10-15 years have highlighted that DM (both type 1 and type 2) increases the risk of active TB and that patients with dual disease have worse TB treatment outcomes compared with those who have just TB alone. The rapidly growing epidemic of DM in low and middle income countries therefore threatens TB control efforts and might derail progress made towards achieving the Sustainable Development Goal of ending TB by 2030. Likewise TB may provoke hyperglycaemia and result in overt DM in susceptible persons.

Our study is based on the analysis of treatment of 30 patients with comorbid TB / diabetes pathology who were hospitalized during 2020-2021.

The management of DM during TB treatment is aimed at improving TB treatment outcomes and reducing DM-related morbidity and mortality. The key activities are optimizing glycaemic control (through dietary instructions and medication) and implementing measures to reduce the risk of cardiovascular disease. Metformin is the first choice oral glucose-lowering drug for TB patients. Sulphonylurea derivatives can be used as add-ons or in patients who cannot use metformin although drug-drug interactions with rifampicin limit their use. Insulin is effective in patients with severe hyperglycaemia but has several disadvantages limiting its use in TB patients in programmatic settings. Cardiovascular risk assessment should be considered in TB-DM patients through counselling and prescription of anti-hypertensive, lipid-lowering and anti-platelet treatment with the aim of lowering early and long-term cardiovascular morbidity and mortality. Aspirin and statins should be considered early on in patients who have a previous history of cardiovascular disease.

Monitoring of glucose control during TB treatment is best done by measurement of FBG. HbA1c can be used but is generally not repeated within 2-3 months after starting DM treatment. The frequency of monitoring depends on DM severity. In mild cases (for example, HbA1c < 8% at baseline), blood glucose or HbA1c measurement can be repeated after 3 months. In more severe cases (for example, HbA1c > 10%), FBG measurements should be done more frequently, for example every one – two weeks until reasonable control is achieved. If FBG cannot be done because patients have come to the clinic in a non-fasting state, then post-prandial blood glucose