## THE USE OF NATURAL HEPATOPROTECTOR WITH IMMUNOMODULATING PROPERTIES IN PATIENTS WITH PULMONARY TUBERCULOSIS WITH VARIOUS ADVERSE REACTIONS TO ANTITUBERCULOSIS DRUGS

Yu. O. Matviienko, O. R. Panasyukova, O. M. Rekalova, V. M. Zhadan, C. G. Yasir

State organization "Yanovsky National institute of phthisiology and pulmonology, National Academy of medical sciences of Ukraine", Kyiv, Ukraine

**Abstract.** The study of the characteristics of the immunological manifestations of toxic-allergic reactions (TAR) of drug intolerance to antituberculosis drugs (ATD) in patients with pulmonary tuberculosis (TB), determining the most rational ways of immunocorrection with clinical manifestations of the TAR are relevant and will help to increase the effectiveness of the treatment of such patients by reducing their amount complications in treatment.

**The aim of the work**: to study the effectiveness of the use of natural hepatoprotector from biomass lysate of probiotic lactic acid bacteria in the complex treatment of patients with TB with various adverse reactions to ATD by evaluating its effect on biochemical and immunological indicators of blood and the duration of treatment in the hospital.

Materials and methods. The results of the clinical and laboratory examination of 46 patients with lung TB were analyzed, among them 20 patients of the 1st group were additionally taken treatment with hepatoprotectors, and 26 patients with TB of the 2nd group without this appointment made up the control group. Hepatoprotector from biomass lysate of probiotic lactic acid bacteria, was prescribed for 20 days to patients of the 1st group, including 5 patients with TAR to ATD (1TAR subgroup), 10 patients with toxic reactions (1TR subgroup) and 5 patients without side effects on ATD (1WE subgroup). Immunological (quantity CD3+19-, CD4+8-, CD4-8+, CD3-16+, CD3-19+— cells and phagocytes of the blood) and biochemical (ALT level, AST level) indicators of peripheral blood were measured in dynamics before and after treatment with hepatoprotectors. To evaluate immunological indicators, 20 blood donors were examined without clinical signs of somatic and infectious pathology.

**Results and discussion.** Under the action of the hepatoprotector from biomass lysate of probiotic lactic acid bacteria, the amount of T-lymphocytes increased significantly in the second and third subgroups of patients (1TR and 1WE) due to both the helper and supressor T-subpopulations; the number of natural killers (NK) increased by 1.5 times in patients with TAR. Taking the drug contributed to the stimulation of the phagocyte immune cells and normalization of the liver functional state. There was a significant increase in liver indicators ALT and AST in the 2TR subgroup of patients who did not receive the hepatoprotector.

**Conclusions.** The hepatoprotector from biomass lysate of probiotic lactic acid bacteria promotes to normalizations of increased levels of liver enzymes, stimulates the lymphocytic, phagocytic immune links and killer activity of NK cells in patients with TB with toxic reactions to medicines. This leads to a reliable positive therapeutic effect of treatment by reducing the deadlines for patients with adverse reactions to ATD in the hospital.

Key words: hepatoprotector, immunomodulator, lung tuberculosis, toxic-allergic reactions, anti-TB drugs.