IMPACT OF COMBINED THERAPY WITH CYCLOFERON ON SOME IMMUNE PARAMETERS IN PATIENTS WITH PULMONARY TUBERCULOSIS

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Background: The efficiency of immunomodulating drugs and their impact on the tuberculosis process in patients with pulmonary tuberculosis is one of the actual problems of modern phthisiology. Cycloferon is a low molecular weight inducer of early interferon synthesis, has a strong immunomodulatory effect. **Aim:** To assess the impact of combined therapy with Cycloferon on some immune parameters in patients with disseminated pulmonary tuberculosis. **Material and methods:** A total of 73 patients with disseminated pulmonary tuberculosis were randomized to the study group (SG) and control group (CG). Standart regimen of antitubercular chemotherapy was used in 29 patients of control group. 44 patients of the study group received antitubercular chemotherapy treatment combined with cycloferon. All patients underwent standard laboratory investigations. The content of subpopulations of lymphocytes, parameters of phagocytosis were determined additionally. Statistical processing was performed using the package Statistica 6.1. Indicators of the distribution that is different from the normal, were described by medians and interquartile span. Statistical analysis was performed using nonparametric methods (curve Terry Wilcoxon and Mann-Whitney, chi-square). Statistically significant differences were considered at $p<0,05$. **Results:** In assessing the dynamics of cellular immunity parameters increased level of $CD3^+$-lymphocytes was revealed in both groups: the SG - 1.4-times more ($p<0,001$), and the CG - 1.3 times more ($p=0,1$). A similar pattern was noted in increasing of the number of $CD4^+$- and $CD8^+$-lymphocytes. An increase in the immunoregulatory index was established after two months of treatment. The number of $CD25^+$-lymphocytes also increased by 1.12 times ($p<0,01$). At the same time, trend towards reduction of $CD25^+$-lymphocytes by 1.08 times ($p=0.9$) was determined in the patients of the control group. Phagocytic index was increased in both groups. **Conclusions:** 1. Activation of T-cell-type immune response, under the influence of Cycloferon, increases initially low total number of T-lymphocytes and the significantly increases specific subpopulations of T-lymphocytes (CD4 +, CD8 +, CD25 +). 2. Using of Cycloferon increases phagocytic index.