Title: CD4+/CD8+ T-cells ratio in patients with pulmonary tuberculosis

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Body: Introduction: A wide range of immune components are involved in an effective immune response against M. tuberculosis. CD4+ and CD8+ T-cells are central for protection against active tuberculosis. The purpose of this research was studying CD4+/CD8+ T-cells ratio and parameters of spirometry in 34 patients with pulmonary tuberculosis. Material and methods Parameters of spirometry, CD4+/CD8+ T-cells ratio were analyzed. Depending on CD4+/CD8+ T-cells ratio patients with pulmonary tuberculosis have been shared into 2 groups: 1 group - 18 patients CD4+/CD8+ ratio < 1,3; 2 group - 16 patients CD4+/CD8+ ratio > 1,3. There was no difference in age between groups. Student's t-test were used in the statistical analysis. Significance level was set at 0,05. Results: Mean values of parameters spirometry in each group are submitted on the diagram.

It is revealed, that groups authentically (p < 0,05) differed on parameters of spirometry IRV, VC, FVC, FEV1, FEF25, FEF50, FEF75, FEF 25-75. CD4+/CD8+ T-cells ratio correlated with parameters of spirometry (IRV, VC, FVC, FEV1, FEF25, FEF50, FEF75, FEF 25-75) in patients with pulmonary tuberculosis. At parameter CD4+/CD8+ T-cells ratio > 1,3 the lowest parameters of spirometry were marked, and at parameter CD4+/CD8+ T-cells ratio < 1,3 parameters of spirometry were the highest. Conclusion: connection between CD4+/CD8+ T-cells ratio and parameters of spirometry is revealed in patients with pulmonary tuberculosis.