Study of Mechanisms of Pulmonal Tissue Treatment in Destructive Tuberculosis

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INTRODUCTION. Disruption of the extracellular matrix is one of the most important pathological events in the formation of residual changes in lung tissue in tuberculous inflammation.

AIM. Investigation of the dynamics of connective tissue reorganization in lung tuberculosis with a different profile of pathogen resistance to antituberculosis drugs.

MATERIALS AND METHODS. 124 patients with new cases of pulmonary TB: group I (n=84) – patients with multidrug-resistant TB; group II (n=40) – patients with pulmonary TB with preserved sensitivity of the pathogen to drugs.

RESULTS. After 3 months of treatment in group I remained 11.9 % bacterial excretion. After 3 months of treatment in group II there was a decrease in the activity of macrophages against the background of the termination of bacterial excretion and a decrease in the levels of MMP-9, OSS and AS, which indicates a slowdown of the destruction processes against the background of low fibrotic activity. After 3 months of treatment in group I, fibrosis was active, accompanied by an increase in OSS levels and a decrease in OS levels. Slow sputum conversion in group I was accompanied by a slow (8.2 %) decrease in the ratio of MMP-9 / TIMP-1 due to further increase in the level of MMP-9.

CONCLUSIONS. In group I, there was a significantly higher activity of the destruction processes, while in group II, there was a lower activity of the fibrotic processes.

KEY WORDS: tuberculosis, connective tissue, aldosterone, matrix metalloproteinase, fibrosis.

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