

Pathohistological features of lung tissue in patients with combined tuberculosis and diabetes mellitus

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Conflict of interest: none

BACKGROUND. Pathomorphological changes in the lungs in tuberculosis are complex and multi-stage. They range from the formation of granulomas and necrotic processes to the development of caverns and fibrosis, collectively leading to a complex of destructive changes in the lung tissue.

MATERIALS AND METHODS. A prospective pathomorphological study was conducted of 60 cases of death of patients who died from various causes, in which pulmonary tuberculosis and type 2 diabetes appeared as the main disease in the final clinical and patho-anatomical diagnoses.

The patients were divided into three groups: the first included 20 cases in which a diagnosis of pulmonary tuberculosis was established without pronounced accompanying pathology; the second included 20 cases of the combined pathology of tuberculosis and type 2 diabetes; the third included 20 cases of patients with type 2 diabetes without tuberculosis. The groups of patients were representative in terms of age and sex.

CONCLUSIONS. Pathohistological changes in the lungs of patients with tuberculosis against the background of diabetes mellitus include microangiopathies, desquamation, and remodeling of the alveolar epithelium with the formation of pulmonary fibrosis, which serves as the basis for alterations in the architectonics of bronchopulmonary tissue, leading to impaired functional activity of the airways.

KEY WORDS: morphology, tuberculosis, diabetes, microangiopathy, fibrosis.