

Drug-resistant pulmonary tuberculosis with surgical treatment: clinical forms, histological and macroscopic aspects

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Conflict of interest: none

OBJECTIVE. To clarify the clinical forms of drug-resistant pulmonary tuberculosis with surgical treatment and their relationship with the morphological activity of specific inflammation and the detection of *Mycobacterium tuberculosis* (MBT) in the surgical material.

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MATERIALS AND METHODS. The study had a cohort retrospective character. The two groups of patients were studied – with multidrug-resistant tuberculosis (n=27) and pre-extensively drug-resistant tuberculosis (n=25). All patients after completion of a standardized 6-month or individualized chemotherapy was performed surgery. The results of morphological examination namely clarification of pulmonary tuberculosis clinical forms and the morphological degree of activity of a specific inflammatory process were analyzed. A comparative analysis of MBT detection by the cultural method in the surgical material depending on the forms of pulmonary tuberculosis and its degree of activity was performed.

RESULTS AND DISCUSSION. Regardless of the drug-resistant profile, different forms of pulmonary tuberculosis were presented in both study groups. In general, cases of multiple tuberculomas (24; 46.2 %) were quantitative prevailed with predominance in group 1. In second place in frequency was diagnosed fibrocaceous tuberculosis (10; 19.2 %) at that cases of pre-extensively drug-resistant tuberculosis (7; 28.0 %) more than twice prevailed. A diagnosis of residual post-tuberculosis changes in the lungs (7; 13.5 %) was at third place, which also prevailed in group 2 (6; 24.0 %). According of morphological examination, it was found that only a quarter of patients at the time of surgery achieved remission of the disease (12; 23.1 %) with a predominance of group 1 (8; 32.0 %). The progression of specific inflammation persisted (18; 34.6 %) in a third of observations in both groups. During surgery operating material was collected for cultural research, which was conducted in 41 cases (78.8 %). In most cases (30; 57.7 %), MBT was not detected, the largest proportion occurred on lung tuberculoma (17; 32.7 %). In almost quarter of all cases, the MBT was detected in surgical material (12; 23.1 %). The share of MBT detection was much higher in fibrocaceous tuberculosis (4; 40.0 %), compared to cases of solitary tuberculomas (4; 16.7 %). The MBT was also detected in residual post-tuberculosis changes – only in the group of pre-extensively drug-resistant tuberculosis (3; 12.0 %). It is established that the morphological activity of the inflammatory process does not clearly correlate with cases of cultural detection of MBT.

CONCLUSIONS. The use of modern chemotherapeutic regimens for the treatment of tuberculosis with multidrug resistance and pre-extensively drug-resistant tuberculosis during, in the main course of therapy does not allow to achieve complete abacylation in such patients, which causes additional surgical treatment. In cases of pre-extensively drug-resistant tuberculosis, the development of more severe forms of lung tuberculosis and the lower preoperative effectiveness of specific anti-tuberculosis therapy was observed.

KEY WORDS: drug-resistant pulmonary tuberculosis, surgical treatment, morphology and macroscopic examination.