

MINI-INVASIVE THORACOPLASTY IN THE SURGICAL TREATMENT OF DESTRUCTIVE PULMONARY TUBERCULOSIS

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Abstract

Aim: to evaluate results of application of the developed technique of minimally invasive extrapleural thoracoplasty in the surgical treatment of patients with destructive pulmonary tuberculosis.

Object and methods. Minimally invasive thoracoplasty was performed in 15 patients (study group): men made up 100 %, in the age range from 26 to 58 years. Chronic forms of pulmonary tuberculosis were diagnosed in 10 (66.6 %) patients, newly diagnosed tuberculosis in 5 (33.4 %). Multidrug-resistant tuberculosis was observed in 78 % of patients. Bacterial excretion was observed in 86 % of patients. The size of the cavity in the lung did not exceed 6 cm. All patients in the pre- and postoperative periods received chemotherapy regimens based on the prescription of the CMAC / CRTB treatment regimen. The following effectiveness criteria were assessed: cessation of bacterial excretion 1 month after surgery (negative Bactec culture); closure of the destructive cavity confirmed on chest CT scan, the number of postoperative complications and the presence of relapses in the postoperative period.

A new method of minimally invasive thoracoplasty was developed to improve the method of collapse-surgical treatment of patients with destructive pulmonary tuberculosis. It uses a resection of small segments of ribs, both in length and in number, extrapleural apicolysis and mediastinal pneumolysis, fixation of the lowered apex of the lung with polypropylene mesh, sealing the created extrapleural cavity with collagen to achieve adequate collapse of the lung in the cavernous zone and accelerate reparative pericavitary processes.

The results. 15 patients were operated on according to this technique. Postoperative complications were observed in 1 (6.6 %) patient. Cessation of bacterial excretion after 1 month of treatment was registered in 100 % of patients, closure of the cavity after 2 months of treatment was achieved in 14 (93.3 %) patients.

Key words: minimally invasive thoracoplasty, destructive pulmonary tuberculosis, polypropylene mesh, collagen plates.

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