USE OF LIVE TISSUE WELDING TECHNOLOGY IN LUNG RESECTION IN PATIENTS WITH TUBERCULOSIS

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Abstract

The aim of the study is to determine the optimal use of low-temperature high-frequency coagulation for biological tissue welding when performing lung resection for tuberculosis.

Materials and methods. 40 patients with destructive pulmonary tuberculosis were examined during their surgical treatment. In 20 patients, a lung resection was performed using a linear weld; in the other 20 patients, a lung resection was performed using a linear mechanical suture. For welding of the tissue, an automatic mode of hardware EK 300 M1 welded complex in 10 arbitrary units was used, corresponding to 50 % of the maximum power of the complex. We compared the results obtained in groups on suture tightness regarding hemostasis and aerostasis, lung reexpansion time, the dynamics of postoperative pleural exudation, the presence/absence of pulmonary pleural complications, the duration of removal of pleural drains, the total duration of postoperative treatment.

Results and conclusions. It was found that the use of a linear weld with lung resection for tuberculosis reduced the duration of postoperative treatment to 15,7 days (32,3 days in the comparison group), contributed to the absence of postoperative complications, a more rapid course of the postoperative period, which ensured satisfactory outcomes of treatment in all patients and a significant reduction in the duration of postoperative treatment compared with traditional methods of suturing of the lung parenchyma.

Key words: live tissue welding, tuberculosis, lung resection.

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