

Fibrin glue administration to support bronchial stump line.

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Abstract:

Bronchopleural fistula is an important cause of mortality and morbidity after pulmonary resection. The use of fibrin glue to reduce the tension and number of sutures in the bronchial stump was assessed in this prospective study of 20 patients between June 2002 and May 2003. They all had a high risk of bronchopleural fistula development because of bronchiectasis, tuberculosis, lung abscess, diabetes mellitus, preoperative neoadjuvant radiotherapy, or residual tumor at the surgical margin. After pulmonary resection, the bronchial stump was closed with separate nonabsorbable sutures supported with fibrin glue. Bronchopleural fistula was observed in only 1 (5%) patient during 6.45 +/- 3.09 months of follow-up. There was no postoperative mortality. Closing the bronchial stump with an appropriate technique and supporting it with fibrin glue were considered effective in preventing bronchopleural fistula development after pulmonary resection in high-risk patients.