

Postoperative bronchial stump fistula after lobectomy: response to occlusion with polyglycolic acid mesh and fibrin glue via bronchoscopy.

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Abstract:

Bronchial stump fistula after resection of lung cancer is an extremely difficult to treat postoperative complication. Endoscopic fistula closure is a favorable alternative, potentially avoiding major surgical intervention. an 80-year-old man underwent curative resection of squamous cell carcinoma by left upper lobectomy of the lung. The patient suddenly developed massive subcutaneous emphysema on postoperative day 10. Bronchoscopy revealed a fistula about 3 mm in diameter at the lateral edge of the bronchial stump. Concentrated fibrinogen 0.5 ml (fluid A) was sprinkled on the bronchial fistula initially, and then pieces of polyglycolic acid mesh presoaked in fluid A or fluid B (thrombin) of the fibrin glue were pushed with biopsy forceps into the fistula in an alternating fashion (A->B->A->B) under endotracheal local anesthesia. Air leakage was stopped, and the patient did not develop empyema. Particularly for patients in poor general condition, our noninvasive technique seems to serve as a therapy of first choice.