Bronchial stump coverage and postpneumonectomy bronchopleural fistula.

Abstract: To prevent postpneumonectomy bronchopleural fistula, coverage of the bronchial stump is recommended, especially for patients treated with neoadjuvant and adjuvant chemotherapy or radiochemotherapy. We compared outcomes after proximal pericardial fat pad coverage and coverage with pleura and surrounding tissues, by retrospective analysis of the records of 243 patients. Postpneumonectomy bronchopleural fistula occurred in 7/143 (4.9%) patients who had pericardial fat pad coverage, and in 6/100 (6.0%) treated by pleural covering. Bronchopleural fistula occurred in 11 patients within 21 days, in one after 2 months, and one after 6 months. Univariate analysis of comorbidities and risk factors did not show any significant differences between the groups. Advanced T stage and carcinomatous lymphangiosis at the resection margin were associated with a higher risk of bronchopleural fistula development, independent of the technique. Reinforcement of the bronchial stump by proximal pericardial fat pad coverage appears to be safe and feasible. It is comparable to coverage with pleura and surrounding tissues.