

Endobronchial closure of a bronchopleural fistula using a fibrin glue-coated collagen patch and fibrin glue.

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Abstract:

Bronchopleural fistulas associated with empyema can occur as life-threatening sequelae after pulmonary resection, occurring most frequently after pneumonectomy. Three bronchopleural fistulas, 5-6 mm in diameter, were successfully treated using a fibrin gluecoated collagen patch (FGCCP) and fibrin glue (FG) at the site of a bronchopleural fistula. Through the clinical experiences, we introduce the methodology to perform the endobronchial closure of bronchopleural fistulas. Data were collected by reviewing the clinical charts of patients diagnosed with post-lobectomy bronchopleural fistula at Sapporo Minami-Sanjo Hospital from June 2004 to December 2010. Bronchopleural fistula was diagnosed by means of endoscopic visualization. Three cases of post-lobectomy and one case of post-pneumonectomy bronchopleural fistula were collected. A FGCCP fragment was packed within the fistula, and the fragment grasped with the forceps was kept in this position for approximately a minute, a time during which a FGCCP becomes adhesive, and the patch fragment was released. After releasing the patch fragment, the FG was applied directly on the FGCCP using a two-channel catheter. There have been few reports of the bronchoscopic closure of bronchopleural fistulas using a FGCCP and FG. Closure of small bronchopleural fistulas with the application of a FGCCP and FG may offer a valuable therapeutic alternative. © 2013 The Editorial Committee of Annals of Thoracic and Cardiovascular Surgery. All rights reserved.