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**Title:** Endoscopic bronchial occlusion with Watanabe silicone prosthesis and biological glue for the treatment of alveolopleural fistulas

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**Body:** Introduction: Alveolopleural fistula (APF) is the communication of the distal bronchial tree and pleural space, and supposes a serious problem for its associated morbi-mortality. The objective is to evaluate a endoscopic bronchial occlusion with a silicone prosthesis (Watanabe spigots) and biological glue. Patients and methods: Observational, retrospective, descriptive study, collecting bronchial occlusion cases in our hospital from 2004 to 2010. General data collected, including details of previous and current illnesses, pleural drainage, fiberbronchoscopy, location of dependent bronchus, spigots implanted, glue instilled, recurrences, pleurodesis and monitoring. Results: 6 patients and 7 sessions of bronchial occlusion. Average age 60, 3F/3M. The predisposing diseases were neoplasia, pneumonia and lung abscess. Debuting as empyema or pneumothorax, with a drain placed 23 days on average prior to the occlusion. Performed under general anaesthesia, the responsible bronchus located with balloon catheter, ventilator volumes, dye or sight of bubbling. Two spigots placed per session on 3 occasions, and 1 in 4 others, in sizes M and S. N-butyl cyanoacrylate was instilled in 4 sessions. The leak stopped in the operating theatre in all cases, with late recurrence in 3. No complications except expectoration of 2 spigots. Definitive lung re-expansion in 4 patients, with subsequent pleurodesis and drain removal. Two patients died from the progression of their underlying disease. Conclusions: Endoscopic bronchial occlusion with Watanabe spigots and N-butyl-cyanoacrylate is an effective, technically simple method without complications for the treatment of APF.