

## Ultraflex Expandable Metallic Stent for the Treatment of a Bronchopleural Fistula After Pneumonectomy

Carlos Enrique García Franco, Javier Flandes Aldeyturriaga and José Zapatero Gaviria *Ann Thorac Surg* 2005;79:386

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CORRESPONDENCE

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## Ultraflex Expandable Metallic Stent for the Treatment of a Bronchopleural Fistula After Pneumonectomy To the Editor:

We have read with great interest the article by Tayama and coworkers [1] describing their experience with a modified Dumon stent (Novatech, Plan de Grasse, France) for the treatment of a bronchopleural fistula in the right main bronchus after pneumonectomy. We recently had a similar case with an identical complication and we used an Ultraflex expandable stent (Boston Scientific International, Colombes, France). Due to the limited experience in using stents for this kind of complication, we present our case.

A 41-year-old man underwent a right pneumonectomy after induction chemotherapy for an epidermoid carcinoma located in the right main bronchus with mediastinal lymph node dissection. During the postoperative course the patient had a bronchopleural fistula of the main bronchus develop plus an associated empyema. An open thoracostomy was necessary, and an unsuccessful attempt was made to close the cavity with myoplastic procedures. This attempt failed as a consequence of a methicillin-resistant staphylococcus aureus that infected the myoplasty. Therefore, an open thoracostomy had to be repeated. It took us 4 months to eradicate the pathogenic organisms located in the cavity; antibiotic therapy was applied along with local treatment of the wound.

The patient was then offered the possibility of trying to close the stump with an Ultraflex stent, and he consented. Using a rigid bronchoscope we introduced an Ultraflex stent that was covered with silicone, 6 cm in length and 1.6 cm in diameter. This isolated the right bronchial stump from the rest of the respiratory tree. After 2 months with the stent, the thoracostomy closed spontaneously as the patient had neither air leakage nor pathogenic organisms. The stent remained in place for an additional 5 months and was then removed with rigid bronchoscopy by using forceps and laser techniques. Then it became apparent that the stump had healed properly. The patient is recovering and undergoes regular check-ups.

This recovery confirms the healing of the bronchial fistula. We believe that the autoexpandable stents adapt better to the bronchial tree, and we have proved that removal is possible by using laser techniques. We think this technique is useful in complicated cases of bronchopleural fistula of the main bronchi. Carlos Enrique García Franco, MD Javier Flandes Aldeyturriaga, MD, PhD José Zapatero Gaviria, MD, PhD

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## Subxiphoid Pericardiostomy Versus Percutaneous **Extended Catheter Drainage**

To the Editor:

Buchanan and colleagues [1] detail their experience in 29 patients with pericardial effusions and suggest that echocardiography-guided pericardiocentesis and extended catheter drainage is a safe and effective management. However, their definition of safe and effective challenges the imagination. They report a 10% (3 of 29) conversion rate to a thoracotomy for complications that included a left ventricular tear, a right ventricular tear, and inability to appropriately position the pericardial drain. All of these misdirected catheters occurred under the guise of accurate echocardiographic guidance. We reported a similar ventricular perforation rate of 9% (2 of 23) resulting in 1 death when cardiologists trained in echocardiography performed the same technique [2]. Furthermore, Buchanan and colleagues [1] narrowly defined the effectiveness of this technique as a clinically significant recurrence within 30 days, and they reported a 7% recurrence rate. However, in our series, average time to symptomatic recurrence was 39 days, and when patients were followed-up long enough this resulted in a 33% recurrence rate [2].

In contrast, in a large series of patients with pericardial effusions treated with subxiphoid pericardiostomy, we reported no operative deaths, a complication rate of only 1% (1 of 94), and a pericardial effusion recurrence rate of 1% (1 of 94) [2]. These results were reaffirmed in a larger series of patients formed from two centers [3]. Subxiphoid pericardiostomy is a simple and safe procedure for the treatment of malignant and nonmalignant pericardial effusions. The procedure can be performed under local anesthesia in approximately 50% of patients and allows direct visualization, biopsy, and exploration of the pericardium and pericardial cavity. Although there is no hard and fast rule regarding the duration of subxiphoid drainage, in our experience and that of others [4], suction through a large pericardial tube for 4 to 5 days places the parietal and visceral pericardium in apposition, a prerequisite for symphysis to take place. Pericardiocentesis with extended catheter drainage should be reserved for patients with hemodynamic instability who would not tolerate a safer and more definitive therapy.

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