The failure of lung transplantation may be caused by airway complications (1). Bronchial stenosis is the most frequent airway complication with a range reported in literature between 1.6% and 32% (1,2), with a higher incidence in patients with cystic fibrosis (5). Usually it is a stricture at the anastomotic line and it may lead to obstructive airway disease, with high morbidity and mortality for respiratory failure and pulmonary infection, eventually resulting in transplant rejection (6).

There are many treatment options and the use of a multimodality approach is very frequent, often consisting in balloon dilation, ablation, and stent placement (1). Stenting is the most effective procedure for rapid improvement in respiratory function and stability of the result (3,7). For solving this issue self-expanding metal stents are preferred to silicone stents, because they are characterized by better adhesion to the bronchial wall, less thickness and low possibility of migration (3,4), but they are not devoid of problems, especially for their long-term use that favors the growth of granulation tissue resulting in restenosis (2).

Ischemia to the donor bronchial stump, with consequent necrosis at the suture line, is the cause of another severe complication, the dehiscence of the anastomosis. Other factors that lead to this condition are the donor lung ischemic time and the number of rejection episodes, with a higher incidence in cystic fibrosis even in this case (5). It occurs frequently during the early postoperative period, it’s difficult to treat with high mortality, often as a result of infectious morbidity.

**Objectives**

Anastomotic airway complications are a severe cause of morbidity after lung transplantation and bronchial stenosis is the most common one. We present a case of dehiscence at the anastomosis site, occurred about four weeks after bilateral lung transplantation, and its management by an alternative use of the bronchial stenting procedure.

**Methods**

A 29 years old male patient, in care for cystic fibrosis, after bilateral lung transplantation presented a large dehiscence at the anastomotic suture line of the main right bronchus (D). In order to avoid a new thoracotomy, after a review of the literature, we chose an endoscopic approach and decided to place an uncovered metal stent Ultraflex™ -Boston Scientific 14x30mm (B) into the main right bronchus by endoscopic and fluoroscopic guide (A-C). The purpose was to induce the growth of granulation tissue (E), taking advantage of this side effect to allow the closure of the dehiscence and then to remove the stent.

**Results**

After 4 weeks and the removal of the stent (G), the bronchial wall appeared full repaired, with good clinical and radiological evolution. After 3, 6 and 12 months we performed an endoscopic follow up and the last one showed the anastomoses patent and healed, without evidence of dehiscence (F).

**Conclusion**

The endoscopic stenting procedure is an approach minimal invasive that may lead to a good result for the management of bronchial dehiscence after lung transplantation, as an alternative to open surgery especially when the latter is contraindicated. Furthermore this approach doesn’t preclude the possibility of open surgery in case of failure.