



Management of airway dehiscence post lung transplantation a case series

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Introduction:

- Airway dehiscence increases the mortality and morbidity and impacts the outcome of transplantation in this population. We will hereby present a case series of airway dehiscence management following lung transplantation.

Case 1:

- A 46 years old patient who had a double-lung transplantation for idiopathic pulmonary hypertension.
- Five weeks after transplantation she developed a necrosis with dehiscence of the donor's left main bronchus.
- CT chest showed a loss of left main bronchus integrity. Bronchoscopy and successful left main bronchus stenting using a covered metallic stent 12x40 mm.
- Patient was weaned from mechanical ventilator few days later and stent was removed 7 weeks later.

Case 2:

- A 51 years old patient who developed a bilateral airway dehiscence 8 weeks post double-lung transplantation.
- CT chest showed loss of integrity of the two main bronchus. Fiberoptic bronchoscopy revealed bilateral incomplete dehiscence.
- Successful bilateral airway stenting using a covered metallic stent (12x30 mm) for the LMB, and (12x20 mm) for the RMB.
- Successful weaning few days later and stents removed 8 weeks later.

Case 3:

- A 46 years old patient who had a double-lung transplantation complicated with a right pleuro esophageal fistula, surgically repaired.
- She then developed a bilateral complete airway dehiscence. The LMB dehiscence was surgically repaired, while the right was endoscopically managed using a covered metallic stent 12x20 mm.
- She developed a complete atelectasis of the LLL due to a punctiform bronchus. Successful covered metallic stent 8x15 mm of the LLL.
- The RMB stent was removed 6 weeks later and the LMB 5 months after.

Conclusion:

- Airway dehiscence following lung transplantation is a challenging complication to manage, due to increased mortality and morbidity in this population.
- Management of such complication needs a multidisciplinary approach.
- To date there is no consensus for the management of this complication. Management as airway stenting and redo surgery if indicated should be discussed on a case by case basis.