

## Anaesthetic Considerations for Lung Volume Reduction Surgery—A Case Report

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### Abstract

**Introduction:** This case describes some of the unique problems faced by the thoracic anaesthesiologists during anaesthesia for lung volume reduction surgery. **Clinical Picture:** The usual pulmonary function requirements for lobectomy are normally not met in these patients with severe emphysema. **Treatment:** Maintenance of the functional residual capacity of the lung and normocapnia during anaesthesia are not as important. Instead problems due to barotrauma and dynamic hyperinflation from positive pressure ventilation are. **Outcome:** Modification of ventilation strategy and providing an anaesthetic tailored towards early extubation is the cornerstone of the anaesthetic plan. **Conclusion:** A good understanding of the respiratory physiology in patients with severe emphysema is essential.

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**Key words:** Dynamic hyperinflation, Early extubation, Emphysema, One-lung ventilation, Permissive hypercapnia

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