Case Report

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.

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

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