Endobronchial Stenting in Patients Requiring Mechanical Ventilation for Major Airway Obstruction

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Abstract

Objective: To examine the value of therapeutic rigid bronchoscopy on subsequent ventilator weaning in ventilated patients with major airway obstruction. Materials and Methods: Retrospective review of the medical records of patients who were receiving mechanical ventilation up to the time of rigid bronchoscopy over the period from September 1994 to January 1999. The setting is in an acute tertiary hospital. All patients underwent rigid bronchoscopy with endoscopic techniques (forceps removal, balloon dilation, Nd:YAG laser resection and stent insertion) aimed at restoration of major airway patency. Results: Seven patients were identified; 2 with benign stenosis and 5 with malignant stenosis. Six out of the 7 patients had presented with acute respiratory distress requiring emergent intubation, whilst 1 patient had extubation difficulties following general anaesthesia with endotracheal intubation. Three out of the 7 patients had previously failed extubation attempts. All 7 patients were successfully extubated within 48 hours following the procedure. Conclusions: Therapeutic rigid bronchoscopy is effective in the acute management of respiratory distress from central airway obstruction. Dramatic improvements in ventilatory status following therapeutic rigid bronchoscopy allow ventilator liberation in a select group of patients with an otherwise good performance status.

Key words: Extubation, Respiratory distress, Rigid bronchoscope, Ventilator weaning

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