

Anaesthetic management of a cut-throat surgery

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ABSTRACT

Introduction: Tracheal stenosis is a relatively rare complication of tracheal intubation and can present as a potentially life-threatening emergency. Tracheal resection with primary re-anastomosis is a well-defined life-saving procedure for severe tracheal stenosis refractory to balloon dilatation where anaesthetic management is crucial in ensuring a favourable outcome. These two cases aimed to report the overwhelming challenges in anaesthetic management during tracheal resection for severe tracheal stenosis. **Cases Description:** *Case 1:* A 39-year-old man with a complex medical history of liver cirrhosis, bronchiectasis and recurrent chest infections requiring multiple intubations presented with shortness of breath. He was diagnosed to have tracheal stenosis at the level of C5/C6. *Case 2:* A 45-year-old man with underlying major depressive and anxiety disorder required intubation for benzodiazepine overdose. He presented with worsening dyspnoea five months post-intubation and was diagnosed to have tracheal stenosis at the level of C7/T1. Both patients had successful tracheal resection and reconstruction surgeries with a comprehensive peri-operative management; pre-operative counselling, extensive outline of cross field ventilation and a multi-disciplinary post-operative care. Both patients were able to be weaned within 24 hours, extubated and had an uncomplicated post operative recovery period. **Discussion:** The success in maintaining anaesthesia and securing airway whilst aiming to provide a good surgical access in complex cases such as tracheal resection relies on extensive pre-operative planning, communication and teamwork between the anaesthetist and the surgeon. Cross field ventilation technique is a safe modality, proven to be successful in tracheal resection surgery negating the need of extracorporeal membrane oxygenation (ECMO) or cardiopulmonary bypass (CPB) despite the demonstrated success of these two alternatives Cross field ventilation technique is associated with less perioperative blood loss compared to surgery done utilizing ECMO or CPB.