

Tracheal Stents, Surgical Stress And Airway Access; TIVA For Tracheoesophageal Fistula: A Case Report.

Sakthi Nathan ¹, Sharmini Nair ¹, Joshua Ryan ¹, Shukri Jahit ², Lim Wee Leong ¹

¹ Dept. of Anaesthesia & Intensive Care, Sungai Buloh Hospital, Malaysia.

² Dept. of Surgery, Sungai Buloh Hospital, Malaysia.

CASE REPORT

Symptomatic tracheal stenosis is a life threatening condition which requires urgent and often repeated interventions such as tracheal dilatation, stent implantation and stent revision procedures. Anaesthetic management in this subgroup of patients poses a significant challenge, as the Anaesthesiologist has to ensure adequate ventilation through a stenotic airway, maintain an adequate depth of anaesthesia to suppress the stress response to surgery, whilst continually providing an optimal surgical access to the airway.

MANAGEMENT

Total intravenous anaesthesia (TIVA) is rapidly emerging as one of the anaesthetic techniques of choice for these procedures and Propofol is the commonly used agent due to its smooth onset, easy titratability, short duration of action and effective bronchodilatory properties. Recently, the ultra short acting opioid, Remifentanil has been shown to be a useful anaesthetic adjuvant due to its favorable pharmacokinetic characteristics including rapid metabolism, non-cumulative nature irrespective of duration of infusion and rapid recovery profile without the attending risks of respiratory compromise. We report a case of monitored anaesthesia care for revision of tracheal stent and removal of esophageal stent in a patient with a tracheoesophageal fistula, post esophagectomy, successfully maintaining spontaneous ventilation and stable operating conditions throughout the procedure, using a target-controlled infusion (TCI) of Propofol and Remifentanil.

CONCLUSIONS

The synergy of Propofol-Remifentanil TCI is favourable in providing safe sedation and analgesia during airway procedures.