



Case Report

Perioperative management of a post-buccal carcinoma patient with tracheoesophageal fistula and tracheal stent presenting with acute respiratory distress

Freeda.G^{1*}, Sankararaman.N², Arul Kumar.V³, Arunkumar A S & MDICU Team⁴, Piyush Madhao Bawane⁵, Harish Reddy Lingareddy⁶

¹Consultant - Anaesthesiology, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

²Clinical Lead, Consultant - Interventional Pulmonology, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

³Senior Registrar - Pulmonology, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

⁴Clinical Lead - Intensive Care Unit, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

⁵Clinical Lead - Medical Gastroenterology, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

⁶Associate Consultant - Medical Gastroenterology, Kauvery Hospital, Radial Road, Chennai. Tamil Nadu

*Correspondence

Abstract

Background

Acquired tracheoesophageal fistula (TEF) in post-carcinoma patients, especially in the presence of existing airway compromise like a tracheal stent, poses a significant and life-threatening challenge, often complicated by aspiration pneumonia and acute respiratory distress syndrome (ARDS). The concurrent conditions necessitate a careful, multidisciplinary approach to airway management and perioperative care to prevent further respiratory deterioration.

Key words: Tracheal stent; Arterial blood gas (ABG); Hypoxia

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1. Case Presentation

A 65-year-old man, previously treated for left buccal mucosa carcinoma and limited mouth opening (submucosal fibrosis) presented with severe breathing difficulty. He had undergone surgery and had a tracheal stent placed to maintain airway patency and allow speech. Tracheal stents are used to prevent airway collapse or blockage in patients with post-surgical or radiation-induced narrowing (Freitag L, et al., *Eur Respir J*, 1994).

2. On Examination

The patient had an abnormal connection between the windpipe and food pipe (tracheoesophageal fistula) and was dependent on a PEG tube for nutrition. He developed aspiration pneumonia due to accidental entry of food or secretions into the lungs.

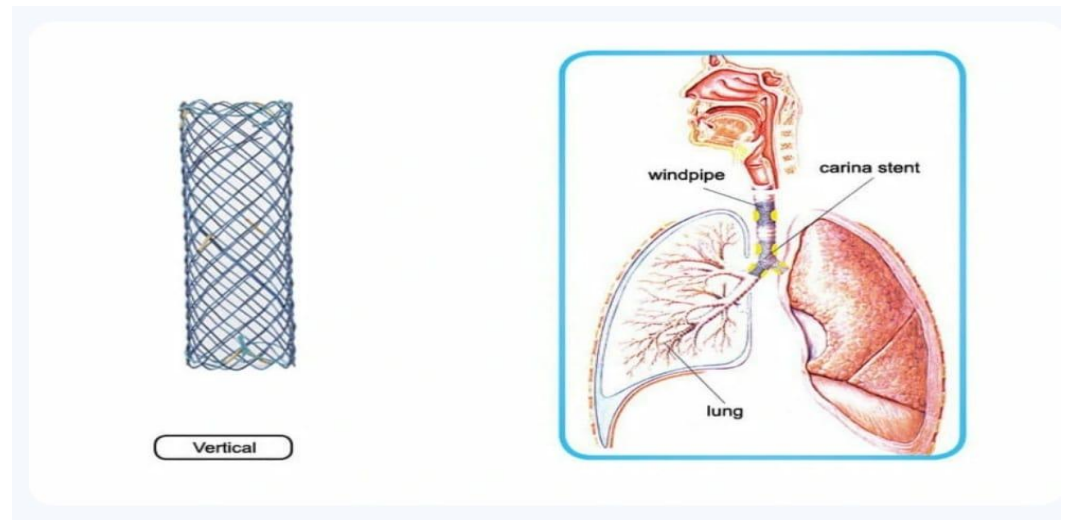


Fig (1): Tracheal stent



3. Preoperative Findings

Arterial blood gas (ABG) showed hypoxia (low oxygen), hyponatremia (low sodium), and hyperglycemia (high blood sugar) – all corrected before anesthesia.

4. Anesthetic Management

Etomidate and fentanyl were used to ensure hemodynamic stability. Lung lavage was performed to clear thick secretions and improve oxygenation.

5. Postoperative Care and Outcome

He was managed in the ICU with BiPAP support, antibiotics, chest physiotherapy, and PEG/TPN feeding. The patient gradually improved and was discharged after replacement of his PEG tube.

6. Conclusion

we conclude that, careful airway planning is vital in tracheal stent cases. Aspiration prevention and safe anaesthesia ensure stability. Finally, team coordination improves peri-operative outcomes.