INTRODUCTION

Airway management is most challenging for anaesthesiologists especially in ear, nose and throat surgeries as both surgeons and anaesthesists share a common field. Further any obstruction in the airway like tracheal stenosis can pose an impending challenge. Acute management of tracheal stenosis is still lacking. Some anaesthesiologist elect to use small size endotracheal tubes placed above the stenotic region and some use jet ventilation, LMA, or even tracheostomy.\(^1\)\(^4\)

Case Report

A 48 year old male with history of asthma was posted for Functional Endoscopic Sinus Surgery (FESS) for chronic sinusitis under general anesthesia. He was a chronic smoker, tobacco chewer with mild restriction in mouth opening (2 finger). Chest X-Ray was clear. In the preoperative room nebulisation was done with combimist. Written informed consent was taken. On the operative table all monitors (Pulse oximeter, ECG, NIBP,Etco2) were attached. 18 gauge intravenous canula was given and ringers lactate was started. Patient was preoxygenated with 100% oxygen for 3-5 minutes. Premedication was given with inj. Glycopyrrolate (0.2 mg i.v.), inj. Fentanyl (100 microgram i.v.) and inj. Midazolam (1.0 mg i.v.). Induction was done with inj. Propofol (100 mg i.v.). For intubation inj. Succinyl choline (100 mg i.v.) was given. 2 attempts of intubation with 7.5 and 6.5 mm endotracheal tube failed. Next a gum elastic bougie was attempted but could not passed beyond 1-2 cm of vocal cord. Immediately emergency tracheostomy was done and airway was secured. Anesthesia was maintained with isoflurane and vecuronium. At the end of surgery patient was reversed with inj. Neostigmine (2.5 mg i.v.) and inj. Glycopyrrolate (0.5 mg i.v.). The patient was shifted to recovery room with tracheostomy tube in situ on spontaneous ventilation. He was advised for further evaluation and management for his undiagnosed tracheal stenosis.

Keywords: Tracheal stenosis, difficult intubation, tracheostomy.

ABSTRACT

Tracheal stenosis has multiple causes like trauma, chronic inflammation, neoplasm, collagen vascular diseases or idiopathic. A 48 year old male with history of asthma was posted for Functional Endoscopic Sinus Surgery under general anesthesia. After obtaining written informed consent he was premedicated with inj. Glycopyrrolate (0.2 mg i.v.), inj. Fentanyl (100 microgram i.v.) and inj. Midazolam (1.0 mg i.v.). Induction was done with inj. Propofol (100 mg i.v.). For intubation inj. Succinyl choline (100 mg i.v.) was given. 2 attempts of intubation with 7.5 and 6.5 mm endotracheal tube failed. Next a gum elastic bougie was attempted but could not passed beyond 1-2 cm of vocal cord. Immediately emergency tracheostomy was done and airway was secured. Anesthesia was maintained with isoflurane and vecuronium. At the end of surgery patient was reversed with inj. Neostigmine (2.5 mg i.v.) and inj. Glycopyrrolate (0.5 mg i.v.). The patient was shifted to recovery room with tracheostomy tube in situ on spontaneous ventilation. He was advised for further evaluation and management for his undiagnosed tracheal stenosis.

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DISCUSSION

Risk factors for adult tracheal stenosis include a history of prolonged intubation (>24 hours), history of traumatic intubation, unrecognised cases of malignancy, infections, inflammation or collagen vascular disorders.

In 6-21% of cases of prolonged intubation tracheal stenosis develops.

History of prolonged intubation (>24 hours) is the most common cause of tracheal stenosis. Asymptomatic patients pose a real challenge for the anaesthesiologist.

Idiopathic tracheal stenosis is an uncommon form of tracheal stenosis usually involving the subglottic area.

Our patient did not have any respiratory symptoms and was misdiagnosed to have bronchial asthma 2 years back.

There was no history of any subglottic stenosis suggesting possibility of idiopathic tracheal stenosis. Treatment includes laser, balloons, biopsy forcep, steroid injection, mitomycin ointment, tracheal transplant or resection.

REFERENCES


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