

Original Research Paper

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ENDOTRACHEAL CUFF TEAR DURING AWAKE FIBREOPTIC GUIDED NASOTRACHEAL INTUBATION- AN ANAESTHESIOLOGIST'S NIGHTMARE A CASE REPORT

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Various factors may contribute to the endotracheal tube cuff tear during nasotracheal intubation. We report a sharp nasal spur in the right nostril leading to failed cuff inflation. An 18 year old male with TM joint ankylosis was posted for gap arthroplasty. Twice after successful fibre-optic guided nasotracheal intubation but failed cuff inflation via the right nostril, a successful attempt was made at nasotracheal intubation with cuff inflation via the left nostril. Cuff tear caused by a nasal spur is infrequent, but an anaesthesiologist should be abreast of this complication and its subsequent management during nasotracheal intubation.

KEYWORDS:

INTRODUCTION

Epistaxis , bacteremia, mucosal tears, sinusitis, turbinate avulsion, perforation of pyriform fossa etc are some of the complications following nasotracheal intubation. We report a case of previously undetected nasal spur leading to endotracheal tube cuff tear which adjoined to the difficult airway senario in a patient with temporo- mandibular joint ankylosis.

Case report

An 18 year old patient with temporo-mandibular joint ankylosis was posted for gap arthroplasty. Airway assessment revealed decreased mouth opening of 1 cm measured incisor to incisor and right nostril patency more than the left. Successful placement of fibreoptic guided nasotracheal tube was done via the right nostril but inflation of the endotracheal cuff failed. Suspecting a defect in the cuff, endotracheal tube was exchanged with another using Cook's airway exchange catheter. Astonishingly, cuff inflation failed yet again. Suspecting some pathology along the nasal passage, fibreoptic nasal intubation was done through left nostril with successful cuff inflation. Intra operative period was uneventful and nasal endoscopy was done prior to extubation which revealed a sharp spur in the right nostril.

DISCUSSION

The cuff of the endotracheal tube can be damaged due to multiple reasons during its passage through the nasal cavity with deviated nasal septum or any abnormal bony structure . Nasal endoscopy/ fibreoptic bronchoscopy may reveal such pathologies in airway anatomy but our institutional practice of using a split nasal airway led us to miss the nasal spur. The extent of the nasal examination is debatable especially if the bilateral nasal cavities are patent.

CONCLUSION

Endotracheal tube cuff tear by a nasal spur is rare. But an anaesthesiologist should remain abreast of this airway anomaly, impending complications and immediate management during nasotracheal intubation.

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