

10-2013

Difficult Airway in a Patient With Tracheal Stenosis

Stanlies D'Souza

Baystate Health, dsouzastan@yahoo.com

Follow this and additional works at: https://scholarlycommons.libraryinfo.bhs.org/all_works

Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Shah M, Chahla T, D'Souza S. Difficult Airway in a Patient With Tracheal Stenosis. Mcc Meeting, Oct 2013.

This Presentations, Research is brought to you for free and open access by Scholarly Commons @ Baystate Health. It has been accepted for inclusion in All Scholarly Works by an authorized administrator of Scholarly Commons @ Baystate Health.

Difficult Airway in a Patient With Tracheal Stenosis

Mehul Shah DO MPH, Toni Chahla and Stanlies D' Souza MD

Department of Anesthesiology, Baystate Medical Center/ Tufts University School of Medicine, Springfield, MA

INTRODUCTION

Traumatic intubations can pose as unforeseen challenges in subsequent operations. We present a case whereby even with prior planning and anticipation, we were unable to secure an airway with an ETT. We needed to wake the patient up and revisit the operation after intervention.

CASE DESCRIPTION

A 51 year old female with known tracheal stenosis secondary to prior traumatic emergent intubation presented for CABG with triple vessel disease.

During asleep fiberoptic intubation an abnormal soft tissue web-like structure was noticed in the right lateral trachea at 18 cm from incisor level. Following an unsuccessful attempted intubation with 6.0 size tube, an LMA was placed and patient was awakened.

In a separate setting, an asleep fiberoptic airway evaluation showed 7-10 mm long tracheal stenosis beginning 3.5 cm distal to the vocal cords. This stenosis required balloon dilatation and the procedure was performed with a properly positioned LMA and total intravenous anesthetic technique.



REFERENCES

1. Asai T, Morris S. The laryngeal mask airway: its features, effects and role. Can J Anaesth. 1994;41:930-60
2. Campo SL, Denman WT. The laryngeal mask airway: its role in the difficult airway. Int Anesthesiol Clin. 2000;38:29-45
3. Loh K S, Irish J C. Traumatic complications of intubation and other airway management procedures. Anesthesiol Clin North America. 2002;20:953-69

DISCUSSION

Unanticipated tracheal stenosis will present as the inability to advance the endotracheal tube past the stenotic lesion. At times, a smaller ETT may be able to be advanced past the stenotic lesion.

The insertion of a laryngeal mask airway may provide adequate airway management if difficulty presents with ETT placement as highlighted in the difficult airway algorithm. In addition, an LMA can be used as a conduit for a flexible fiberoptic bronchoscope to visualize the stenotic lesion.^{1,2}

In anticipation of a difficult airway in patients with a previous history of traumatic intubation, it is important to assess the integrity of the larynx with bronchoscopy and provide treatment prior to elective procedures.³

CONCLUSION

Previous traumatic intubations or history of tracheal stenosis can present as challenges in airway securement due to tracheal web formations.

It might be prudent to place the ETT under direct visual guidance after a bronchoscopy and balloon dilatation of tracheal stenosis.