

ANESTHETIC MANAGEMENT IN A PATIENT WITH POST BURNS CONTRACTURE NECK

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INTRODUCTION

Airway management patients with facial and neck burns presents as a challenge to the anaesthetist. Restricted mouth opening, decreased oropharyngeal space, limited atlanto-occipital joint extension, reduced submandibular space and fibrosed neck are the contributing factors to difficult airway. Herein presenting a case of successful airway and anaesthetic management of a post burn patient with obliterated airway with severely limited neck extension by awake nasal fiberoptic bronchoscopy guided intubation.

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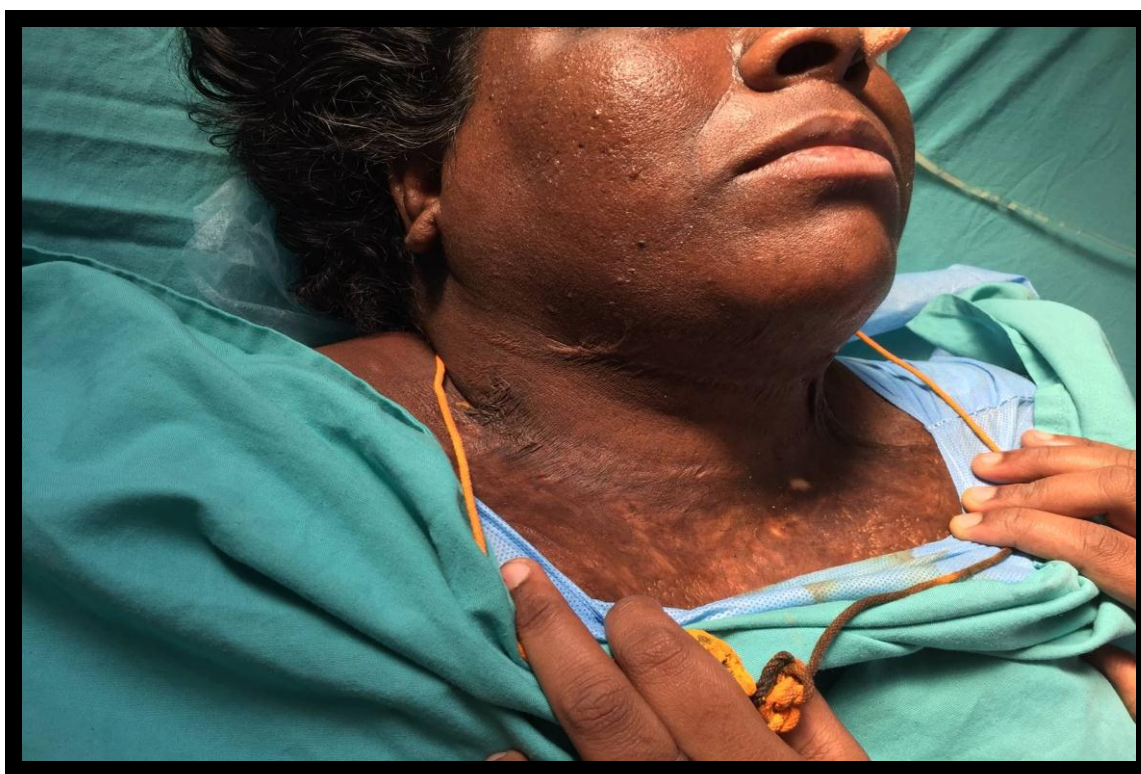
Herein presenting a case of successful airway and anaesthetic management of a post burn patient with obliterated airway with severely limited neck extension by awake nasal fiberoptic bronchoscopy guided intubation.

CASE REPORT

A 42 year old female posted for lap-cholecystectomy assessed under ASA-II had severe face, neck, chest burns following a domestic accident one year back. On examination; MPC: na, NM: restricted, MO: 10mm, Dentition -, Apart from airway findings, X-Ray soft tissue neck showed reduced oropharyngeal space. Preoperative preparation: Malleable stylet, face masks

of different sizes, oral & nasopharyngeal airways of various sizes, array of ETTs, Macintosh & McCoy laryngoscope blades, different handles, LMA, PLMA, ILMA, fibroptic bronchoscope & tracheostomy set. Anaesthetic management: Our first plan was awake nasal FOB guided intubation followed by USG guided airway assessment prior to FOB, LMA guided FOB placement, blind nasal intubation, tracheostomy; if FOB intubation failed. On the arrival of patient in operating room, all non invasive monitoring devices were connected. BP = 130/90 mm Hg; PR = 88/min; RR = 15/min; SpO₂ = 97% in RA. 18G cannula secured. IV Glycopyrrolate was given at 10mg/kg body weight. Nasopharyngeal airway block with 2 pledgets soaked in 4% topical LOX.

Oropharyngeal airway was blocked with Lignocaine 10% spray. 6.5 mm flexometallic ETT was mounted on to an adult fiberscope. FOB was negotiated nasally & 2ml of 2% Lignocaine was administered by spray as you go technique through FOB and intubated without difficulty. Tube position confirmed, fixed & secured. Maintenance anaesthesia with Fentanyl (2µg), N₂O, O₂, Sevo, Atracurium. Surgery was uneventful & patient was extubated after awake & breathing spontaneously.



DISCUSSION

The causes of difficult airway are limited oropharyngeal space, limited atlanto-occipital extension, decreased pharyngeal space, decreased submandibular space.^[1] This contributes to an inability to align oral & pharyngeal axes. Use of FOB guided intubation is the gold standard when compared to other techniques. SGA, LMA and ILMA were not possible due to extremely limited mouth opening.

Tracheostomy was not possible due to fibrosed neck structures & loss of anatomical landmarks.^[2] Problems are mainly associated with extubation of such patients but an effective extubation strategy should have a low reintubation rate.

CONCLUSION

We recommend that thorough understanding of difficult airway should be meticulously seen before taking up cases for surgery. Proper intra-operative planning and team work is necessary for positive outcome to manage such cases. While extubating patients with facial and neck burns, difficult intubation kit including FOB must be kept ready in OR.

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