A New Airway Management Technique In A Case Of Intra-Oral Extension Of Rhinosporidiosis

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Citation

Abstract
Intraoral extension of rhinosporidiosis can make airway management challenging as the loss of nasal patency as well as intraoral mass makes mask ventilation difficult. In this case positive pressure ventilation was achieved by using two nasal airways orally.

INTRODUCTION
Airway management has always been a challenge to the anesthesiologist. One has to balance between patient comfort and cooperativeness versus induction of anesthesia and perhaps inability to secure airway. We describe an interesting case of airway management in a patient with nasal rhinosporidiosis with intraoral extension.

CASE REPORT
A 30 year old ASA Gr. I male weighing 35 kg presented with complaints of snoring and occasional difficulty in breathing. There was a history of interrupted sleep. On examination of the nose, a mass was seen extending to the posterior nares bilaterally. Throat examination revealed an intraoral mass obscuring the visualization of posterior pharyngeal wall (photo-I).

Figure 1
Photo 1: Picture showing intra-oral extension of mass.

The patient could manipulate the mass digitally and pull out the mass anteriorly in case of severe difficulty in breathing. Indirect laryngoscopy could not be performed in view of the size of the mass. CT scan revealed mass extending in the nasal cavity and oropharynx stopping in short of the epiglottis. All blood investigations were normal. Excision and biopsy of mass was planed. Preinduction, on table, patient received inj. Glycopyrrolate 0.2mg IV, inj. Midazolam 1 mg IV, and inj. Fentanyl 50 ug IV. Monitoring was done with help of cardioscope, pulse oxymeter. The blood pressure was recorded manually. General anesthesia was induced using small-titrated doses of inj. Propofol IV. At loss of eyelash, positive pressure ventilation was attempted using semi open circuit and reservoir bag with 100% O2. Ventilation was difficult. 6.5 No. disposable romson's (PVC) nasopharyngeal airway was inserted orally on either side after applying lubricating gel (photo-II).
Chest expansion improved with IPPV. Relaxation was achieved using inj. Succinylcholine 75mg IV. A gentle laryngoscopy was performed passing the blade along the tongue surface (photo-III).

**Figure 3**
Photo 3: The laryngoscope blade is passed gently along the surface.

The lesion extended up to the glottic inlet. Trachea was intubated with 7 No. cuffed PVC tube. Tube position was confirmed by auscultation. Rest of surgery was uneventful. Following excision the neuromuscular blockade was reversed and trachea extubated. Histopathological diagnosis was rhinosporidiosis.

**DISCUSSION**
Induction of anesthesia is always associated with fear of loss of airway. Awake techniques like fiber optic intubation are advantageous because of safety, reliability, success rate and patient acceptance. Flexible fiberoptic is a valuable tool available to manage the difficult airway. However it may not always be available and certain amount of expertise is needed. In our case fiber optic option was not considered, as there was loss of patency of both nares plus an intraoral mass. An awake laryngoscopy was an alternative. But as the mass could be manually pulled out we decided to induce general anesthesia first. Propofol was used as an induction agent for its excellent relaxation properties and fast recovery. We encountered airway obstruction after induction. Oral airway is stiffer and rests in the midline. Hence we decided on romson's disposable nasopharyngeal airway 6.5 No. size was arbitrarily decided. These airways are soft and malleable, which advantageous in this situation. Confirmation of ability to ventilate enabled us to use a muscle relaxant and attempt laryngoscopy at optimal intubations conditions. The laryngoscope blade was inserted gently along the surface of tongue and cords visualized and trachea intubated.

Similar use of nasal airway orally has not been mentioned as yet. This technique would prove advantageous in similar intraoral midline masses with contraindication to nasal placement of airway.

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