Letters to Editor

Anesthesiologist to surgeons’ rescue: an off label use of choledochoscope

Sir,
The passage of nasogastric tube (NGT) through an esophageal stricture is a challenge. Strategies suggested to facilitate its passage include generous lubrication; chilling the tube; grasping the thyroid and lifting anteriorly; neck flexion and extension maneuvers; using two fingers in the mouth to facilitate passage of the tube; and direct visualization by laryngoscope, endoscope [1] and glidescope [2]. We used an innovative method of passing the NGT in an urgent situation when all other methods of passing the NGT were unsuccessful.

A 30-year-old man with esophageal strictures at C7 and D6-D11 levels following accidental corrosive ingestion was posted for abdominal coloplasty and colonic pull up. After surgical exposure, extensive adhesions of ascending and transverse colon with the stomach were observed. The stomach was extensively scarred and unsuitable for pull up. During mobilization and dissection the vascular integrity of the required colonic segment was compromised despite adequate measures to prevent bowel ischemia by the application of warm towels and delivery of 100% oxygen. All measures to harvest the required segment of colon for transposition proved unsuccessful.

We attempted to pass a 12Fr and 10Fr Ryle’s tube (RT) but failed to negotiate it through the stricture. Esophageal intubation with a 5.5 mm ID endotracheal tube was attempted, but it failed. A 5.0 mm ID ETT was successfully passed beyond the upper stricture but a 3.4 mm pediatric fibrescope could not be negotiated through this tube. A 2.5 mm OD choledochoscope (Karl Storz GmbH and Co. KG, Tuttlingen) was passed beyond the stricture. The presence of light channel and maneuverability of its tip facilitated its passage. Gastrostomy was done and 10Fr RT was pulled up retrograde, tied by a thread to the choledochoscope, and brought out through the mouth.

A guide wire was inserted through the RT into the esophagus, which was pulled out and serial dilatations done over the guide wire. A 16Fr RT could easily pass antegrade over it. In the end, the gastrostomy was closed, colonic resection and anastomosis was done and patient’s trachea extubated.

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Use of Proseal, as an alternative to conventional facemask, to facilitate ventilation in anticipated difficult mask ventilation

Sir,
A 50 kg, 55-year-old man with a rapidly growing 20 cm x 20 cm x 15 cm mobile facial soft tissue tumor over the right cheek (extending superiorly to the infraorbital region, anteriorly till angle of mouth, laterally three finger breadth from tragus and inferiorly till lower border of mandible) was scheduled for growth excision [Figure 1]. Patient’s mouth opening was ~5 cm, temporo-mandibular distance 7 cm and the airway was Mallampati grade 2. Contrast enhanced computed tomography neck revealed a tumor localized to right cheek externally without any extension and intact mucosa. Difficult mask ventilation was anticipated as the large tumor was distorting the angle of mouth potentially making an air tight seal difficult.

Electrokardiogram, noninvasive blood pressure, pulse oximetry and capnometry monitoring were initiated. Xylometazoline
2-4 drops were administered in the left nostril of the patient to decongest the nasal mucosa. Fentanyl 100 mcg, midazolam 1 mg, ractidine 50 mg and metoclopramide 10 mg intravenous (IV) were administered. Patient was preoxygenated with 100% $\text{O}_2$ and after 5 minutes anesthesia was induced slowly with titrated IV dose of propofol (to total of 100 mg) maintaining spontaneous ventilation. Proseal #3 was inserted after adequacy of ventilation was confirmed [Figure 2]. Randall Baker Sourcek mask #2 with Bain circuit attached for intraoral placement and a conventional facemask #4 with adequate gauze pieces were kept as standby. Vecuronium 5 mg IV was given for neuromuscular blockade. Anesthesia was maintained with sevoflurane 3-4% in 100% $\text{O}_2$. Flexometallic tube 7 mm ID was introduced from left nostril and advanced till beyond posterior nares. Thereafter, Proseal was removed, laryngoscopy performed and trachea successfully intubated with the tube. Oxygen saturation remained constant to $\geq 98\%$ during airway instrumentation. Anesthesia was maintained with standard technique. Rest of the perioperative period was uneventful.

Mask ventilation is an essential and fundamental skill in airway management.\textsuperscript{[1]} Anticipating difficult mask seal, Proseal was used for ventilation instead of a conventional facemask. Awake fiberoptic intubation could have been the method of securing airway but the equipment was malfunctioning. The difficult airway algorithm of American Society of Anesthesiologists recommends use of supraglottic devices in failed ventilation/intubation.\textsuperscript{[2]}

Case reports document the utility of supraglottic devices in restoring the ability to ventilate patients who could neither be ventilated nor intubated immediately after induction of general anesthesia.\textsuperscript{[3-6]} Proseal has been found useful in management of the difficult airway and for airway rescue.\textsuperscript{[5]}

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