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Bloodless Turbinectomy following Blind Nasal Intubation

To the Editor:—A healthy 24-yr-old female presented for tonsillectomy. Both nostrils were patent and unobstructed. There was no past history of nasal problems, especially allergic rhinitis, and the septum was central. The larger nostril was chosen for intubation. Cocaine paste was applied to the nasal mucosa using a cotton tipped orange stick as described by Pearman.¹

Fifteen minutes later, after intravenous induction of anesthesia using thiopental, blind nasal intubation of the trachea facilitated with succinylcholine was successfully achieved without bleeding. Direct laryngoscopy did not reveal any bleeding from the postnasal space, nor any other evidence of trauma. The operation was completed uneventfully with minimal bleeding, and the pharynx noted to be clean and dry, prior to extubation with the patient in the lateral position. In the recovery room, acute respiratory distress developed with violent bouts of coughing that ceased abruptly after expulsion of solid material from the mouth during the coughing. This was identified as cartilaginous tissue from the side of the nose that had been intubated. On examination of the nose by the consultant ear, nose, and throat surgeon, the middle turbinate was noted to be absent from that side. The subsequent postoperative recovery proceeded uneventfully.

Reported complications following nasal intubation include trauma to the nasal mucosa producing epistaxis,² erosion of the alae nasae, and sinusitis.³

In the case described, the tube passed easily through the nose after having been prewarmed to soften it and well lubricated. The use of cocaine paste produced excellent vasoconstriction, evident from the absence of bleeding. Indeed, it was this absence of bleeding and the

easy passage of the tube that made the "middle turbinectomy" surprising.

Dislocation of the middle turbinate has been described, but in association with severe hemorrhage requiring blood transfusion.⁴ When cocaine paste has been used in the way described, the absence of bleeding does not exclude severe nasopharyngeal trauma and the introduction of a foreign body into the airway.

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"Disappearing" Endotracheal Tube following Meconium Aspiration: A Possible Solution to the Problem

To the Editor:—We recently encountered two cases of "disappearing" endotracheal tubes during neonatal resuscitation. Both neonates had suspected meconium aspiration and intubation was attempted in an effort to remove meconium from the tracheobronchial tree. In both instances the endotracheal tubes disappeared from sight during efforts to suction meconium from the tracheobronchial tree. In both cases, the 15-mm adapter had been removed from the proximal end of the endotracheal tubes and in one case the endotracheal tube had been cut off at the 11-cm mark. In both cases general anesthesia was required to retrieve the endotracheal tubes from the esophagus.

This complication is not unique. Blanc *et al.*¹ briefly alluded to it in 1973 and Mitchell *et al.*² gave a more complete account of it in 1978. Since these significant complications have arisen, we have reviewed the protocol for meconium aspiration with our colleagues in neonatology and the following adjustments have been made: The 15-mm adapter is no longer removed from the endotracheal tube, rather a meconium aspirator is attached to the 15-mm adapter after the trachea is intubated and suction applied *via* a thumb port as the endotracheal

tube is withdrawn (fig. 1). (Portex* recently designed a special hollow tube that fits into the lumen of a 3-mm endotracheal tube that will allow aspiration of meconium without the need to remove the 15-mm adapter). When the maneuver is complete, the inner hollow tube can be removed from the endotracheal tube and further ventilation/oxygenation can be carried out if necessary.

Regardless of the circumstances, this problem highlights the importance of ensuring that the 15-mm adapter remains attached to the endotracheal tube during intubation attempts.

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