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Revisiting Skill Of Asleep Nasotracheal Intubation

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My opinion

With the advent of video-laryngoscopy, numbers of fiberoptic intubation are dwindling and it is ironic that not so long ago, fiberoptic intubation had itself relegated blind nasotracheal intubation as a skill of the past [1-2]. However, despite the dwindling-to-absent numbers, the skill of the past may still have some role in current present as well as in near future. Therefore, this is our take on what all is needed for revisiting skill of asleep nasotracheal intubation. Firstly, the most common reason for using nasotracheal intubation now-a-days may have gotten limited to surgeons' choice while needing nasotracheal tube to be away from oral surgical fields. Secondly, pathophysiological and psychological morbidity on patients' nasal mucosa and paranasal sinuses may have rendered not only insertion of nasogastric tubes as rarity among events but also insertion of nasotracheal tubes as hesitancy among providers [3-5]. Ironically, we may have forgotten that tubes traversing nasally rather than orally may be avoiding stronger gag reflex because nasally inserted tubes may be sliding off tangentially across the posterior pharyngeal wall rather than orally inserted tubes unavoidably touching and pressing directly on posterior pharyngeal wall, tonsillar area or base of tongue thus eliciting stronger gag reflex before moving further down on its path into trachea or esophagus [6-10].

Herein, we share the options to follow while performing asleep nasotracheal intubation:

If intubation is predicted to be difficult, we prefer to use video-laryngoscopy along with fiberoptic nasal Intubation while watching primarily video monitor of video-laryngoscope rather than the video monitor of fiberoptic scope during nasotracheal intubation.

If intubation is predicted to be easy and if patient is not allergic to latex, we prefer to railroad nasotracheal tube into funnel ended red robin rubber tube [11] before the other end of red robin rubber tube is advanced across one of the lubricated nostrils. We do not let the red robin rubber tube's funnel end to move across the nostril until the other end of red robin rubber tube has been visibly grasped inside oropharynx with our gloved fingers or Magill forceps and pulled out of patient's mouth. Thereafter, we keep pulling out the red robin rubber tube while advancing nasal/nasotracheal tube into oropharynx. Once nasal/nasotracheal tube's distal end is visible in oropharynx, the red robin rubber tube is detached from nasal/nasotracheal tube. Finally, unless the nasal/nasotracheal tube can be blindly advanced into trachea and its proper placement can be confirmed with continuous capnography, we advance nasal/nasotracheal tube into trachea under direct laryngoscopy with or without the aid of Magill forceps. If we are not able to negotiate nasal/nasotracheal tube across glottis, we emergently pass fiberoptic scope across nasal/nasotracheal tube so as to flexibly manipulate before railroading nasal/nasotracheal tube across glottis under the direct visualization on video monitor of emergently used video-laryngoscope.

If patientâ€™s pulse oxygen saturation levels start decreasing during these attempts, we can always leave nasal tube in situ in nasopharynx or oropharynx and temporarily place oral laryngeal mask airway to ventilate and stabilize patient before removing oral laryngeal mask airway to reattempt the nasal/nasotracheal tube advancement into trachea. However, if oral laryngeal mask airway fails to ventilate patient, we can always remove nasal/nasotracheal tube completely out and thence ventilate patient with anesthesia/face mask.

Few questions still remain. It is not clear if there is a latex-free and clear-plastic version of funnel shaped red robin rubber tube and if clear plastic will be difficult to visualize inside oropharynx when we are grasping it with our gloved fingers or Magill forceps. It is not clear whether the length of red robin rubber tube can come into question in some patients when trying to grasp other end without losing the sight of its funnel end and whether gauge/size of red robin rubber tube can come into consideration to keep it as atraumatic as possible to nasal turbinate without losing the agility and sturdiness of red robin rubber tube in holding on to nasal/nasotracheal tube till it has been advanced to oropharynx.

Summarily, it is important that we preemptively revisit education about asleep nasotracheal intubation in case we may have to inevitably use it electively or emergently especially with red robin rubber tube potentially avoiding bleeding from nasal mucosa and trauma to nasal turbinate [12-17] by enclosing/encompassing/encapsulating mucosa/turbinate traumatizing distal beveled tip along with Murphy eye of nasotracheal tube within red robin

rubber tube's funnel shaped lumen.

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