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## What Comes First: Suction Or Intubation Just Like Suction Or Extubation

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# What Comes First: Suction Or Intubation Just Like Suction Or Extubation

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## My opinion

Blind suctioning [1-2] of oral cavity and oropharynx prior to extubating endotracheal tube or supraglottic airway device is routinely recommended to prevent airways emerging from general anesthesia reacting in response to tracheal aspiration of oral and oropharyngeal contents accumulated there while endotracheal tube or supraglottic airway device was in-situ. The question arises whether blind suctioning of oral cavity and oropharynx prior to intubating with endotracheal tube or supraglottic airway device is advisable too unless suctioning of oral cavity and oropharynx under direct visualization is possible prior to intubating with endotracheal tube but not possible prior to intubating with supraglottic airway device. Does it become the question of inadvertent stimulation of patient with suctioning cannula when the first priority is to secure airway after general anesthesia has been induced? However, this priority in a stable patient becomes confusing when besides oral and oropharyngeal secretions, hypopharyngeal (laryngopharyngeal) secretions as regurgitating from cervical esophagus are directly visualized per direct or video laryngoscopy especially when vocal cords are still visible making the intubating personnel eager to intubate first before suctioning hypopharyngeal (laryngopharyngeal) secretions. The problems with intubating first without suctioning hypopharyngeal (laryngopharyngeal) secretions can be firstly that endotracheal intubation is not guaranteed to be successful in first attempt and secondly that the endotracheal tube may carry along hypopharyngeal (laryngopharyngeal) secretions into trachea. Sometimes even in unstable patients, it may be better to suction hypopharyngeal (laryngopharyngeal) secretions and leave a large bore suction cannula into hypopharynx (laryngopharynx) to continuously suction while intubating trachea. Some may ask the role of cricoid pressure [3] during this unpredicted or evolving scenario. Bimanual cricoid pressure may still have a role but it may need one dedicated personnel trained enough to appropriately provide cricoid pressure bimanually.

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Simplistically, the following can be the simple

sequence of events [4-10] when hypopharyngeal (laryngopharyngeal) secretions are predicted to be more likely than not to be present during anesthesia induction and tracheal intubation:

â€œâ€œ,â€œ,â€œ,â€œ,â€œ,â€œ,As soon as after anesthesia induction and getting ready for direct or video laryngoscopy with or without the availability of dedicated personnel providing bimanual cricoid pressure appropriately, the intubating personnel can first suction oral and oropharyngeal secretions blindly and then leave the suction cannula in-situ.

â€œâ€œ,â€œ,â€œ,â€œ,â€œ,â€œ,Thereafter, the direct or video laryngoscope can be inserted conventionally from right side or middle of mouth and sweep the in-situ suction cannula towards the left side of mouth.

â€œâ€œ,â€œ,â€œ,â€œ,â€œ,â€œ,The suction cannula's tip continuously suctioning hypopharyngeal (laryngopharyngeal) secretions as regurgitating from cervical esophagus may be visible posterior and on left side to glottic opening while performing direct or video laryngoscopy.

â€œâ€œ,â€œ,â€œ,â€œ,â€œ,â€œ,If there are more hypopharyngeal (laryngopharyngeal) secretions around vocal cords which are not getting suctioned by the suction cannula in-situ from the left side of mouth, a second suction cannula can be inserted from the right side of mouth to suction hypopharyngeal (laryngopharyngeal) secretions before removing this second suction cannula so as to allow the intubation of trachea after having suctioned hypopharyngeal (laryngopharyngeal) secretions obstructing vocal cords.

â€œâ€œ,â€œ,â€œ,â€œ,â€œ,â€œ,After intubation, it is important to not forget to remove the suction cannula from the left side of mouth.

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The bottom-line is that suctioning may come first before intubation to prevent converting a difficult clinical scenario into disastrous clinical scenario unless comprehensive suctioning of hypopharyngeal (laryngopharyngeal) secretions is evolving as an impending cardiopulmonary arrest and thus as a catastrophic clinical scenario wherein securing airway for adequate oxygenation and ventilation may supersede in priority even if tracheal aspiration of hypopharyngeal (laryngopharyngeal) secretions may happen despite all efforts to protect airway during the

securement of protected airway with cuffed endotracheal tube in situ considering that we do not have direct or video laryngoscopes with in-built suctioning channels on right side or left side of laryngoscope blades [11-14].

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Futuristically, it will be interesting to see if during emergence from anesthesia, suction and extubation can happen concurrently wherein immediately after deflating endotracheal tube's cuff and removing endotracheal tube connector, a suction tubing itself if a snug-fit for endotracheal tube or via 5-in-1 tubing connector [15] if not a snug-fit for endotracheal tube can be directly connected to this endotracheal tube as the trachea is getting extubated so that this endotracheal tube itself can act as suction cannula for secretions accumulated not only in trachea as well as inside the endotracheal tube itself but also to the secretions accumulated above the inflated cuff trickling distally into trachea after cuff's deflation as well as accumulated secretions inside hypopharynx (laryngopharynx), oropharynx and oral cavity as the endotracheal tube acting as suction cannula is getting withdrawn swiftly from trachea across the glottis to traverse across pharynx and oral cavity before coming out completely. The futuristic anesthesia researchers may have to decipher whether the endotracheal tube acting as a suction cannula will drastically change the suction power and pressure [16-17] inflicted on to the airways with endotracheal tube being larger bore than the usual suction cannula. Futuristically, it may be interesting to experimentally decipher whether deflating endotracheal tube's cuff before attaching endotracheal tube to suction tubing (via 5-in-1 connector if not a snug-fit) may potentially induce less pulmonary atelectasis [18-22] as compared to inadvertently connecting suction tubing (via 5-in-1 connector if not a snug-fit) to endotracheal tube when endotracheal tube's cuff is still inflated during the initiation of extubation process.

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