Awake intubation using a combination of rigid video laryngoscope - Flexible bronchoscope as a multimodal airway management

Ashraf Mohamed Ibrahim EL-Molla
Prince Sultan Military Medical City, Saudi Arabia
Email- aosj244@yahoo.com

Abstract

Introduction: Simple algorithms and user-friendly devices provide the infrastructure for good airway management. It is our professional responsibility to put an end to unnecessary loss of life by ensuring a clear goal of maintaining patient oxygenation. The present variety of video-enhanced airway devices, such as video laryngoscopes and fiberscope have brought further improvements in glottic visualization, but still cannot always guarantee successful passage of endotracheal tube. Combining two of the newer technological innovative devices such as a video laryngoscope and a flexible fiberscope can be complementary and prove critical in a situation where each might fail when deployed alone, even in the most skillful and experienced hands, and reports of such complementary use are still relatively scarce and no specific recommendation is present in the main airway management algorithms. The term multimodal airway approach refers to a combined intubation technique as when the larynx is visualized by video-laryngoscope and the fiberscope is used only as a stylet with movable tip to facilitate endotracheal placement.

Background: We present 2 expected difficult intubation cases for 2 male patients aged 26 years and 42 years. We applied conscious sedation by dexmedetomidine, fentanyl, lidocaine and propofol to have consciously sedated patients who were able to tolerate the intubation procedure. Although the videolaryngoscope revealed grade 2 Cormack and Lehane view, it was impossible to pass a bougie into the glottis due to the small mouth opening. Upon utilizing the combined technique of Glidescope-Flexible Fiberscope in one patient and C-MAC – Flexible fiberscope in the other patient, the endotracheal tube was inserted easily in each patient. Awake Multimodal Airway Management (AMAM) can provide safe controlled technique to maximize chances of successful endotracheal intubation and the fiberscope is used only as stylet. We also support and suggest that the American Society of Anesthesiologists (ASA) can include AMAM in the main ASA airway management algorithm.

Method:- The MVL has an anatomically molded cutting edge with an additional bend, and oropharyngeal tissues don't should be withdrawn and packed to accomplish a straight view during laryngoscopy with the MVL. Thus, there is normally no requirement for huge lifting power to envision the glottis. It has been indicated that the utilization of Glidescope video laryngoscope with an anatomically formed edge makes less weight on the tongue when contrasted and the Macintosh blade. After effective sedation of the tongue and pharynx with lidocaine shower, patients can well endure the MVL with negligible discomfort. As far as we can tell, when the oropharyngeal mucosa is anesthetized by the technique portrayed in this investigation, the MVL can be progressed effectively to a situation in the hypopharynx where the epiglottis and larynx can be plainly pictured. Now, aliquots of lidocaine can be showered utilizing a MADgic atomizer (Wolfe Tory Medical Inc., Salt Lake City, UT). The MADgic atomizer is then best in class through the glottis into the larynx and windpipe to shower further aliquots of lidocaine in the rest of the aviation route. This changed shower as-you-go method with the video laryngoscope can give fantastic aviation route effective sedation and is less influenced by discharges or blood contrasted and fiberoptic strategy. It has been utilized effectively in troublesome aviation route patients who experience alert intubation with Glidescope video laryngoscope.

Results: All of these suggest that performing airway topical anesthesia under superior vision of the airway with a video laryngoscope on awake subjects is feasible. Unfortunately, there has been no randomized clinical study comparing video laryngoscopic and fiberoptic techniques of airway topical anesthesia. Before we have enough evidence to make a conclusion that the video laryngoscope is a useful alternative to the FOB for awake intubation, therefore, further studies are needed to evaluate and compare performances of both airway topical anesthesia and awake intubation in difficult airway patients. In such a study, other than the intubation time and success rate, the observed variables should also include the patient’s comfort during airway topical anesthesia and awake intubation, time required for airway topical anesthesia, awake intubating condition, possible difficulties and so forth.

Biography: Ashraf Mohamed Ibrahim EL-Molla is a Consultant Anesthesiologist, Prince Sultan Military Medical City, Saudi Arabia. He is interested in airway management, his recent publication “Bridging Bronchus, type six as a new rare case of a bronchial anomaly

This work is partly presented at 6th International Conference and Exhibition on Anesthesia and Surgery September 07-09, 2017 | London, UK