

References

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Endotracheal intubation in the prehospital settings[☆]



To the Editor,

In a retrospective review, Alter et al. [1] compared Macintosh vs Miller blade for endotracheal intubation (ETI) with direct laryngoscopy (DL) in prehospital settings. The authors conclude that curved blades had higher first attempt and overall success rates when compared to straight blades.

We would like to add several appreciations. First, the difference to the number of uses between the two blades may have constituted a relevant bias since operators may have significantly more experience with the Macintosh compared to the Miller blade. This situation may have conditioned the results. Second, the authors do not add relevant information such as the success of each blade as a rescue device, which rescue device was used when DL failed or the number of intubations performed with a video laryngoscope (VL) as a primary device during the study period. Likewise, it is necessary to take into account different considerations. Limiting the number of attempts (maximum of three attempts) to achieve a timely nontraumatic ETI is the main goal in airway management. [2] Therefore, it is important to make the first attempt in the best conditions and with the device with the highest likelihood of success in order to prevent airway trauma and progression to a "cannot intubate, cannot oxygenate" situation. Thus, the Vortex approach tries to synthesize this safe practice. [3] Prehospital airway management is especially difficult with a high risk of failure. [4] VLS offer, in all settings, a better glottic view and greater ease of use, allow a higher number of ETIs in the first attempt, and reduce the number of failed intubations and complications when compared with DL. [5] Consequently, guidelines recommend that VLS, as well as second-generation laryngeal masks, should be available in all the situations in which the airway is managed, and providers should be appropriately trained in its use. [2] Video laryngoscopy should be considered when DL fails or is expected to be difficult. [2,6] Evidence highlights the importance of training and the kind of selected VL in success of the ETI. In fact, VLS with hyperangulated blade can prolong easy ETIs. [7] Difficult Airway Society suggest the use of video laryngoscopy as first

choice for all ETI of the critically ill patient to avoid multiple attempts and reduce failed intubations: use of a VL that enables use both as a direct laryngoscope and as a VL (i.e. Macintosh-type blade) in easy airways; and a hyperangulated device used with a stylet or bougie as a primary device to treat difficult airways or as a rescue device. These recommendations could be extended to prehospital ETI. The McGrath MAC video laryngoscope is an ideal device because of it allows to use both types of blades and its feasibility for prehospital use. [8] Nonetheless, published data on video laryngoscopy in prehospital airway management are limited and generally of poor quality. [6] The research on airway management must overcome classic goals and focus the strivings in this field. Randomized prehospital control trials addressing video laryngoscopy versus direct laryngoscopy are necessary to expand the body of evidence.

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8 August 2018

<https://doi.org/10.1016/j.ajem.2018.08.050>

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[☆] The authors have no conflicts of interest with respect to these devices.