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Editorial

Endotracheal Intubation of COY1D-19 Patients

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The novel coronavirus (Covid-19) emerged for the first time in China and then rapidly spread and swept the entire world like a tornado killing thousands of patients around the planet. People were advised to stay in-doors to prevent the spread of this deadly disease, and this slogan helped to a greater extent in containing the spread of the virus [1].

Unfortunately, there is no treatment for the disease at present but extensive research is going on to find a definitive treatment.

Regarding endotracheal intubation (ETI) of Covid-19 patients, data are scarce and no randomized clinical trials are available to develop and formulate succinct and acceptable guideline in tackling the problem of ETI in these highly risky and vulnerable patients.

Zuo et al. [2] provide us with a step-wise approach in intubating the patients with Novel coronavirus disease. They emphasize that these patients should be intubated employing the videolaryngoscope. In the same vein, Beverley A O [3] does not recommend the use of glidescope for all intubations, but rather suggest that anesthetists consider using a glidescope in preference to fiberoptic bronchuscopy in COVID-19 patients.

The use of a glidescope or a similar device is useful but we have some concerns regarding the use of videolaryngoscopes (VLs) based on our own experience from Iran which is probably the worst hit by this deadly disease in the Middle East countries with a high death toll.

Although we agree that VLS should preferentially be used in intubating COVID-19 patients, nevertheless would like to emphasize that ETI with VLs is not always straightforward and easy.

Tracing back the history of ETI eversince the Macintosh direct laryngoscopy (DL) was introduced into clinical practice, it has since that time remained the gold standard for ETI [4]. It requires a direct line of sight to align the three axes (oral-pharyngeal-laryngeal) for optimal glottic visualization, and slight manipulations are needed.

Although new airway devices such as VLS have been introduced, the time to successful intubation had been the shortest when the classic Macintosh laryngoscope was used by anesthetists and residents compared to the different forms of VLs [5]. Similarly, others have also floated the idea that it entails a longer time for tracheal intubation when the Glide Scope and McGrath VLs were used in both manikins and patients [6].

Difficulty in passing the endotracheal tube despite improved glottic visualization especially with angulated blade, increased the intubation time [7].

We do agree that videolaryngoscopy is customarily employed when a difficult airway is anticipated. This idea is grounded on the valid assumption that videolaryngoscopy improves the laryngeal view as compared to DL in patients with suspected difficult intubation, but it is shrouded in darkness whether videolaryngoscopy translates to increase in overall endotracheal tube success rates [8].

Furthermore, videolaryngoscopy could possibly be associated with an overall higher rate of complications such as damage of the laryngeal structures including the cuneate and corniculate cartilages as the endotracheal tube is negotiated into the glottic orifice. Such events are noticed when videolaryngoscopy is conducted by a novice or else hurriedly executed by an experienced health provider.

Even with improved glottis visualization, tracheal intubation can still be challenging with varying success rate depending on the provider's experience with the videolaryngoscopy is conducted by a novice or else hurriedly executed by an experienced health provider.

Even with improved glottis visualization, tracheal intubation can still be challenging with varying success rate depending on the provider's experience with the videolaryngoscopy [9]. We have also noticed in our own experience that at times it may be exceedingly difficult to introduce the endotracheal tube through the glottic aperture despite adequate exposure, and the process can only be successfully accomplished if the endotracheal

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tube is rotated 90 degrees anticlock wise to avoid its impingement on the cartilages. Moreover, cases of difficult tracheal tube insertion can be managed successfully if smaller size tubes are used or a malleable guide is introduced into the endotracheal tube prior to its insertion through the glottic opening [10].

Zuo et al. [2] emphasis in performing a rapid airway an assessment often neglected in stressful conditions is commendable because such an assesments which hardly takes a few minutes, if not performed can usher in disastrous repercussions if an accidental difficult intubation is encountered. To the airway indexes that they have provided, we would like to add the upper lip bite test [11] which can be easily and quickly executed in the non-edentulous population.

In conclusion, although we fully endorse that a videolaryngoscope with disposable blades should be available in the airway cart, nevertheless feel that it would be prudent and in the best interest of the patients to also ensure the availibility of a Macintosh laryngoscope with disposable blades in case the care provider is welltrained with this device in executing the task of ETI under stressful conditions.

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