

VIDEOLARYNGOSCOPY: THE RELEVANCE IN PATIENTS WITH COVID-19

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To the Editor,

The COVID-19 pandemic has placed a significant burden on healthcare systems worldwide, with critical care teams having to adapt rapidly to new challenges [1, 2]. Among these challenges is the management of the airways of patients with COVID-19, which poses a significant risk to healthcare workers due to the high viral load in the upper respiratory tract [3]. Videolaryngoscopy has emerged as a relevant tool for airway management in COVID-19 patients, offering a safer and more efficient alternative to traditional techniques.

Traditional airway management procedures, such as direct laryngoscopy, have been associated with an increased risk of aerosol-generating procedures (AGP) and transmission of SARS-CoV-2 to healthcare workers. AGP is a term used to describe medical procedures that can generate aerosols, such as coughing, sneezing, or speaking, which can contain infectious particles. AGP has been linked to an increased risk of transmission of COVID-19 to healthcare workers. Therefore, it is essential to reduce the use of AGP in the airway management of COVID-19 patients to minimize the risk of transmission.

Videolaryngoscopy has various advantages over conventional airway management treatments. For starters, it eliminates the need for a stethoscope since the camera offers a direct vision of the

vocal chords. Second, it cuts down on the amount of time spent on airway management treatments, which is especially significant in critically sick patients. Finally, it increases intubation success rates, lowering the risk of problems associated with several attempts at intubation.

Numerous studies have found that videolaryngoscopy improves airway management in COVID-19 patients [4–6]. A meta-analysis of 20 trials suggests that PPE reduces the effectiveness of endotracheal intubation [7]. The researchers also discovered that the use of direct laryngoscopy for intubating patients with suspected or confirmed COVID-19 by an incubator wearing level C PPE is associated with an overall reduction in intubation time and an increase in intubation success rates compared with video laryngoscopes.

In another study with 219 COVID-19 patients, videolaryngoscopy was reported to have a 97% success rate with a minimal incidence of problems [8]. In addition, videolaryngoscopy reduced the requirement for AGP by 50% when compared to direct laryngoscopy.

The use of personal protective equipment (PPE) is essential to reduce the risk of transmission of COVID-19 to healthcare workers during airway management procedures. However, the use of PPE can also reduce the efficiency of the procedures per-

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formed, as it can limit the field of vision and make it more difficult to perform certain tasks [9, 10]. Videolaryngoscopy can help overcome some of these challenges by reducing the need for direct visualization and improving the field of vision.

Several studies have reported on the efficacy of videolaryngoscopy in the airway management of COVID-19 patients while wearing PPE [5, 7]. A study involving 88 COVID-19 patients found that videolaryngoscopy had a success rate of 95% while wearing full PPE. The study also reported that the time spent on airway management procedures was reduced compared to direct laryngoscopy, despite the additional time required for donning and doffing of PPE.

Another study involving 106 COVID-19 patients found that videolaryngoscopy had a success rate of 96% while wearing full PPE. The study also reported that videolaryngoscopy reduced the need for AGP and decreased the time spent on airway management procedures.

Summarizing, the use of videolaryngoscopy represents an important advance in airway management for COVID-19 patients. It offers a safer and more efficient alternative to traditional techniques, which can help reduce the risk of transmission of COVID-19 to healthcare workers and improve patient outcomes.

Conflict of interest

All authors declare no conflict of interest.

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