

Airway management in personal protective equipment conditions

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To the Editor

Airway management is one of the key skills that medical personnel should master, especially by emergency medical service teams. As shown by many studies, the effectiveness of endotracheal intubation in emergency medicine conditions is insufficient, ranging from 57.6% to 89.9% [1, 2]. However, in the situation of the current SARS-CoV-2 pandemic, medical personnel should treat each patient in pre-hospital conditions as a potentially infected patient, therefore they should perform medical procedures wearing personal protective equipment (PPE) for aerosol generating procedures (AGPs) [3, 4].

It is problematic that PPE-AGP, by limiting movement and visibility, may reduce the effectiveness of individual medical procedures and extend their time [5]. Maslanaka et al. in his meta-analysis he showed that anaesthesiologists wearing PPE-AGP could intubate patients more efficiently with the AirTraQ videolaryngoscope compared to the Macintosh laryngoscope (85.6% vs 68.4%; $p = 0.006$) [6]. However, because of the lack of commonly available videolaryngoscopes in prehospital care conditions, alternative methods of securing the airways to direct laryngoscopy, including new types of laryngoscopes (i.e. Vie Scope®, or the use of supraglottic ventilation devices), are worth considering [7].

Ladny *et al.* stated in his study that blind intubation is highly effective when using the iGel mask and the laryngeal mask, as a guide for the endotracheal tube [8]. Therefore, it is worth considering this method of intubation in the conditions of using PPE-AGP because it does not require such specialized skills as direct laryngoscopy from the operator. Nevertheless, it

is necessary to conduct a study confirming the usefulness of this method of endotracheal intubation in the aspect of patients with suspected SARS-CoV-2.

In summary, thanks to the development of medical technology, there is a wide range of respiratory protection methods alternative to direct laryngoscopy, which medical personnel should use when securing a patient with suspected or confirmed SARS-CoV-2.

Conflict of interest

None declared.

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