

## LETTER TO THE EDITOR

### In response to the letter to the editor regarding “Comparison of the intubation success rate between the intubating catheter and videolaryngoscope in difficult airways: a prospective randomized trial”



Dear Editor,

We thank Dr. Muller for his interest in our study and the Editor-in-Chief, Dr. Schmidt, for allowing us to reply to the letter written about our article.<sup>1</sup>

The author stated that due to the lack of quality publications, unanticipated difficult airway management varies depending on personal preferences. However, it would be wrong to attribute personal preference only to the lack of quality publications. Difficult airway management guidelines, which provide the basic clinical framework for the strategy that clinicians should follow when faced with a difficult airway, offer recommendations based not only on publications but also on clinician experience supported by synthesis and analysis of ideas and open forum comments. These guidelines are subject to revision commensurate with experience, skills, knowledge, and technology evolution. The selection of appropriate drugs and techniques for anesthesia care and airway management depends on the clinician’s experience, training, and preference, the needs or limitations of the patient’s relevant medical problems, the type of procedure, and the environment in which airway management is performed. Therefore, difficult airway management guidelines may be modified or even rejected depending on clinical needs and limitations. In addition, these guidelines are not designed as standard or absolute requirements, and their compliance will not guarantee a special result. Also, their non-compliance does not result in a legal responsibility.<sup>2</sup>

As the author mentioned, laryngoscopy and intubation are separate procedures. However, unlike the authors, we do not think different troubleshooting techniques should always be used in case of difficulties in performing these two procedures because both procedures are intertwined, and the ultimate goal is successful endotracheal intubation. On the other hand, when trying to intubate pediatric patients, it

may be necessary to use two different techniques for these two separate procedures. Given pediatric patients’ different upper airway anatomy, visualization of vocal cords during laryngoscopy does not guarantee successful endotracheal intubation. Even experienced clinicians have difficulty in directing the endotracheal tube to the vocal cords and performing successful intubation, even in the case of easy laryngoscopy in pediatric patients.<sup>3</sup> Considering the Cormack-Lehane (CL) results of our study, the author claimed that the Frova Intubation Catheter (IC) is indicated in cases where the laryngoscopy view is unsatisfactory. Video laryngoscope used in adult patients with difficult intubation improves the CL score. However, it does not guarantee that every patient can be intubated using a video laryngoscope. Of course, in our study, some patients were easier to intubate using the video laryngoscope and Frova IC, but this is not the case in all scenarios. As the tip of the Frova IC is soft to avoid damage, this makes it difficult to direct it to the vocal cords in some patients on whom a video laryngoscope is used for intubation. In such a scenario, using classical laryngoscopy instead of video laryngoscope and performing assistive maneuvers makes directing the Frova IC to the vocal cords easier.

On the other hand, the authors asked some questions about the method section of our study. Most of the patients included in our study underwent elective otolaryngological surgery. This is the main reason why we prefer an endotracheal tube with a large inner diameter. Although we mentioned the range of endotracheal tube diameters in the article, it does not mean that the largest tube in this range was used on every patient, most of our patients undergoing elective otolaryngological surgery were heavy smokers and exposed to airway intervention. We prefer to use an endotracheal tube with a larger inner diameter than that applied to non-smoker patients to manage the ventilation of these patients easily. Assist maneuvers were used when necessary, during the endotracheal intubation procedure, and the related data were given in Table 4.

In our hospital, general anesthesia is provided by the consultant clinician (OO) to approximately 1750 patients per year in the Ear Nose Throat operating theatre. Experienced anesthesia residents AO, IGO, and EA were present in the operating theatre for randomization, data collection, and supply of the necessary device when an anticipated or unanticipated difficult intubation situation was encountered during the study. Patients were ventilated until successful

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intubation was achieved. Written consent was obtained from all patients included in the study. Randomization and allocation concealment were performed with a randomly numbered envelope of patients with previously known difficult intubation, while a random number and letter generating application was used in unanticipated difficult intubation cases.

Although the authors state that the retrospective registration of the data of our study in the New Zealand Clinical Trials registry is a cause for concern, our study was the specialty thesis of the first author (AO), and the entire 100-page thesis was uploaded to the same site in 2018.



We agree with the authors that the potential impact of our study is vast and influential. Based on our clinical experience and studies on this subject, all anesthesia clinics and emergency departments should have the Frova IC for successful intubation of difficult intubation cases.<sup>4</sup> At the same time, the easy learning of applying the Frova IC will make it easier for anesthesia and emergency service residents to learn to manage the airway of patients with difficult intubation. In our clinical practice, we experience that practicing with Frova IC during intubation of patients with easy airways is beneficial for inexperienced clinicians in the airway management of difficult intubation cases. Against this, we must state that our inexperienced residents do not have the same positive experience by using video laryngoscope in patients with an easy airway. In clinicians unfamiliar with the conventional laryngoscope, video laryngoscopes can cause a false sense of security that cannot be guaranteed before attempting intubation. In addition, video laryngoscopes delay and hinder the development of inexperienced clinicians' skills from intubating with direct laryngoscopy. Even experienced anesthesiologists may forget the importance of difficult intubation estimation and intubation planning with careful airway examination, which they should perform for each patient after they start using a video laryngoscope instead of a conventional laryngoscope, and may even partially lose their intubation skills with conventional laryngoscopes.<sup>5</sup>

## Conflicts of interest

The authors declare no conflicts of interest.

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