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LETTER TO THE EDITOR

Videolaryngoscopes: not only for endotracheal intubation

Dear Editor,

Advances in technology enable healthcare professionals to solve problems faster and more easily with lower complication rates. Following the introduction of videolaryngoscopes in clinical practice, increase in success and decrease in complication rates in the management of difficult endotracheal intubation were achieved within a short period, causing rapid popularization of these devices. Even though originally developed for difficult intubation, they quickly entered into routine practice due to their handling similarity to classic laryngoscopes, ease of use and their facilitative properties to 3D image adaptation.[1] Because of these features, videolaryngoscopes are frequently used in areas outside the operating room such as emergency services, ambulances, or intensive care units[2] as well as diagnosing and/or solving various problems in the mouth, pharynx, and larynx.[1] Studies on the use of videolaryngoscopes for different purposes other than endotracheal intubation appear more frequently in the literature, such as intraoral examination and/or small interventions, placement of TEE probe, endoscope or nasogastric tube, assistance for flexible tracheoscopic intubation, providing exposure for laryngeal surgery or nasotracheal intubation.[1–3] In this letter, we wanted to share the various uses of videolaryngoscopes in our clinical practice apart from routine endotracheal intubation, as shown below, and present the pictures of a case (Fig. 1) we considered most unusual.

- Assisting nasotracheal intubation
- Control of vocal cord movements after thyroid operations
- Securing the proper placement of electromyographic tube before thyroidectomy
- Control and removal of foreign bodies
- Placement or correcting malpositions of nasogastric tube
- Guiding fiberoptic bronchoscopes/tracheoscopes, tracheal tube introducers, or bougies
- Laryngeal endoscopy and/or vocal cord injection
- Insertion of transesophageal echocardiography probes
- Assisting deep hypopharyngeal packing

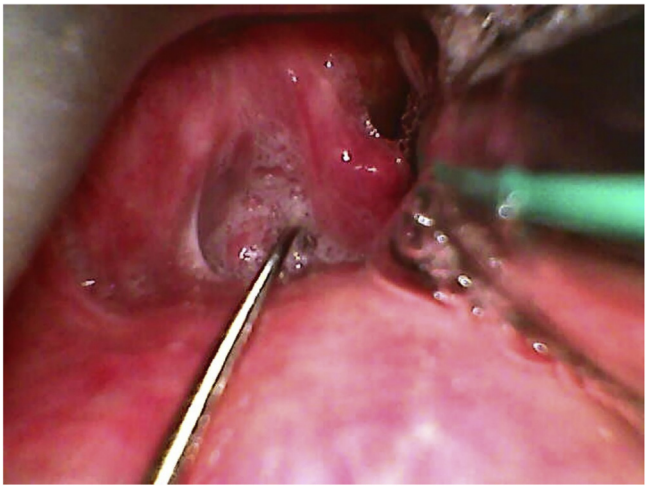

Figure 1 Videolaryngoscope-assisted guidewire insertion during esophageal dilatation in a 31-years-old case of colonic interposition.

- Diagnosing/recording of pathologies from upper airway to just below the vocal cords
- Guidewire placement during esophageal dilatation (Fig. 1)
- Help in advancing the tube when using the tube exchanger to protect the epiglottis

Videolaryngoscopes can provide wide-angle viewing and allow the soft tissue retraction simultaneously. These properties make these devices very useful for healthcare professionals for many procedures in the oropharyngeal cavity, especially in deep levels or in extraordinary anatomic conditions. In this letter, to emphasize the possible novel uses of it, we present two cases in which the videolaryngoscope was used for indications other than endotracheal intubation. Although these devices are not yet widely available for financial reasons, videolaryngoscopes with various features seem to find a larger place in daily practice. Also, their previously mentioned properties, ease of use, and recording features seem to give them a special role in future anesthesiology practice.

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Conflicts of interest

The authors declare no conflicts of interest.

References

1. Goranović T. IntechOpen, Special Considerations in Human Airway Managements Videolaryngoscopy, the Current Role in Airway Management. Special Considerations in Human Airway Managements; 2020, http://dx.doi.org/10.5772/intechopen.93490.
2. Aseri S, Ahmad H, Vallance H. Video laryngoscopy improves endotracheal intubation training for novices. Br J Anaesth. 2015;115:133.
3. Crosby ET. Early clinical experience with a new videolaryngoscope. Can J Anesth. 2014;61:485–8.

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