



## Guide for bougie as an adjunct for an anterior larynx

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### To the Editor,

We read with interest the correspondence by McGuire *et al.*, “Use of a tracheal tube introducer guide to facilitate difficult intubation with a video laryngoscope.”<sup>1</sup> The authors describe a modification to a metal hanger of a secondary medication set (Baxter Healthcare, Mississauga, ON, Canada) to produce a guide for a tracheal tube introducer (“guide for bougie”). This guide helps the placement of the bougie between the vocal cords when confronted with the laryngoscopic view of an anterior larynx. The proposed device may be useful in certain situations; however, some points need to be challenged.

The literature suggest using one of two strategies to confirm correct placement of a tracheal tube introducer.<sup>2</sup> The first approach, and probably the most technical, involves feeling the clicks as it touches the tracheal rings while being advanced. The second approach is the hold-up sign, which involves advancing the introducer until an increase in resistance is felt when the tip becomes lodged in a smaller airway. Many authors now suggest disregarding this sign.<sup>3</sup> The “guide for bougie” described by McGuire

*et al.* may reduce the “feeling” of the tracheal rings and consequently, it may increase the risk of tracheal trauma. The use of a tracheal tube introducer has been associated with many case reports of airway trauma.<sup>3–5</sup> Airway trauma as a complication from its use is probably underreported, partly because a fiberoptic bronchoscopy evaluation is not systematically performed after the use of that adjunct to intubation. There is probably a risk of injury to the mouth and pharynx when using the “guide for bougie” if the configuration of the guide is not adequate or is dysfunctional. This risk could be minimized if the device were manufactured.

Alternatively, the use of an intubating stylet, instead of a bougie with or without the “guide for bougie”, is more secure. This option does not necessitate blindly introducing a foreign body (bougie) over the tip of the tracheal tube into the trachea and reduces the risk of iatrogenic tracheal trauma. In case of an anterior larynx, the stylet can be adjusted to a more pronounced “hockey stick” angle to reach the glottis opening. An often forgotten intubating aid are the intubating forceps (i.e., Magill forceps), which can help to guide a bougie anteriorly and allow additional dexterity for mobilizing the endotracheal tube in difficult airway situations.

In our practice, when confronted with a difficult intubation, as in the presence of an anterior larynx, we prefer to use an intubating stylet instead of a tracheal tube introducer in order to avoid the risk of tracheal trauma. In our view, intubating forceps are a useful and secure alternative. The use of a tracheal tube introducer is reserved as one of our last options.

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## Reply

Thank you to the authors for their interest in our letter entitled ‘‘Use of a tracheal tube introducer guide to facilitate difficult intubation with a video laryngoscope’’.<sup>1</sup> It is important to emphasize that the tracheal tube introducer (TTI) guide is to be used with a video laryngoscope. This facilitates viewing the straight end of the TTI as it passes directly through the vocal cords. There is no need to feel tracheal rings or to push the TTI distally into the lung tissue. It should remain in the trachea or main stem bronchus.

The TTI guide is small and maneuverable when inserted beneath the video laryngoscope, and it should not touch any of the pharyngeal mucosa. Furthermore,

because the wire guide is malleable, many angles can be accommodated.

The best time to use the guide during the procedure is when the vocal cords can be visualized with the video laryngoscope but the angle of the anterior larynx does not allow a styletted endotracheal tube to pass easily. Sometimes the endotracheal tube is impeded at the vocal cords because of this angulation; however, using a TTI with the guide overcomes this problem.

With respect to the use of Magill forceps, in our experience, it helps to lift the TTI toward the vocal cords, but it remains difficult to angle the TTI caudally through the vocal cords.

When confronted with an anterior larynx or a difficult crowded airway, we have found that intubation with a small device such as a TTI has major advantages over struggling with a larger less flexible endotracheal tube.

**Conflicts of interest** None declared.

## Reference

1. *McGuire GP, Tan TP, Wong DT.* Use of a tracheal tube introducer guide to facilitate difficult intubation with a video laryngoscope. *Can J Anesth* 2014; 61: 682-3.

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