CORRESPONDENCE

A technique for securing the Aintree Intubation CatheterTM to a flexible bronchoscope

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Received: 12 October 2017 / Accepted: 8 November 2017 / Published online: 17 November 2017
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To the Editor,

The use of a supraglottic airway (SGA) such as the Laryngeal Mask Airway (LMA®) ClassicTM (Teleflex Inc., Wayne, PA, USA) or the LMA® UniqueTM (Teleflex Inc., Wayne, PA, USA) as a rescue technique for failed tracheal intubation has been incorporated into international guidelines for managing a difficult or failed airway.^{1,2} In 2011, NAP4 identified the Aintree Intubation CatheterTM (AIC; Cook Medical, Bloomington, IN, USA) as a useful aid to intubation through an SGA due to the higher success rate of tracheal intubation with its use.³ In the same year, a retrospective review of patients who underwent flexible bronchoscopic intubation using an AIC through an LMA found this to be a safe and effective technique, with a 93% success rate and a low complication rate.⁴ More recently, the AIC has also been demonstrated to be effective in assisting the bronchoscope-guided exchange of a King Laryngeal TubeTM (King Systems, Noblesville, IN, USA) for an endotracheal tube.⁵

The AIC does, however, have a few nuances. If the AIC is loaded onto a pediatric-sized bronchoscope, it shields the shaft of the bronchoscope, which makes it difficult to control the advancement of the bronchoscope during tracheal intubation through the SGA. Also, the AIC can slip distally over the bronchoscope resulting in difficulty to advance or retract the bronchoscope through the AIC.

Furthermore, the AIC can potentially slip down over the flexible end of the bronchoscope, interfering with the operator's ability to control the tip of the bronchoscope and potentially resulting in damage to the flexible tip.

We would like to describe our preferred technique for securing the AIC to a flexible bronchoscope prior to tracheal intubation through an SGA, which we believe may prove helpful to other readers.

Prior to loading the AIC over the bronchoscope, attach the Rapi-FitTM adapter with a 15-mm connector (Cook Medical, Bloomington, IN, USA) that is supplied with the AIC onto the proximal end of the AIC. Once the AIC is loaded over the bronchoscope, a rubber band can be used to create a choker hitch around the Rapi-Fit adapter and then loop the rubber band over the suction port of the bronchoscope (Figure).

This is a simple technique requiring minimal extra equipment. It facilitates easy and fast release of the AIC that can be performed single-handedly by the operator of the bronchoscope when required.

The addition of the Rapi-Fit adapter to the proximal end of the AIC results in a slightly longer overall AIC length so it covers a slightly greater portion of the flexible bronchoscope shaft. If any further slippage were to occur, or if a short bronchoscope were used, this could potentially lead to decreased maneuverability of the tip of the bronchoscope and potential damage to the flexible tip. This has not occurred in our practice. In addition, a rubber band that is too short may cause the bronchoscope shaft to bend, which risks damage to the device. Lastly, to our knowledge, most rubber bands contain latex, so an alternative approach should be used for a patient with latex allergy.

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Figure A suggested technique for attaching the Aintree Intubation Catheter™ (AIC; Cook Medical, Bloomington, IN, USA) to a flexible bronchoscope by using the Rapi-Fit™ adapter with 15-mm connector (supplied with the AIC; Cook Medical, Bloomington, IN, USA) on the proximal end of the AIC and a rubber band with a choker hitch looped over the suction port of the bronchoscope

Conflicts of interest No conflicts of interest to declare and no funding was received for this manuscript.

Editorial responsibility This submission was handled by Dr. Hilary P. Grocott, Editor-in-Chief, *Canadian Journal of Anesthesia*.

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