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CORRESPONDENCE

A simple maneuver to facilitate tracheal intubation using the Airtraq® laryngoscope with a reinforced endotracheal tube

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To the Editor:

We read with interest the recently published letter by Minonishi *et al.*[1] regarding tracheal intubation with the AirwayScope™ videolaryngoscope (AWS) using straight *vs* curved reinforced endotracheal tubes (ETTs). It was shown that tracheal intubation is more difficult with straight reinforced ETTs than with curved reinforced ETTs. Regardless of using a straight or a curved reinforced ETT, our own clinical experience suggests that a posterior ETT tip location is a common problem during tracheal intubation with the Airtraq® laryngoscope, a device similar to the AWS. Due to this device's wide tube conduit, the ample space between the ETT and the tip of the Airtraq® laryngoscope is a contributing factor to the problem (Figure 1, Panel A).[2,3] This problem may be exacerbated whenever a thin reinforced ETT is used. To address this issue, we often apply a simple maneuver to facilitate tracheal intubation when using the Airtraq® laryngoscope with a reinforced ETT.

If the reinforced ETT is consistently directed posteriorly below the glottis when the glottis is positioned in the middle of the viewfinder,[2,4] we withdraw the Airtraq® laryngoscope from the patient's mouth. We then insert a flexible intubating stylet into the reinforced ETT. The distal end of the reinforced ETT with an intubating stylet is

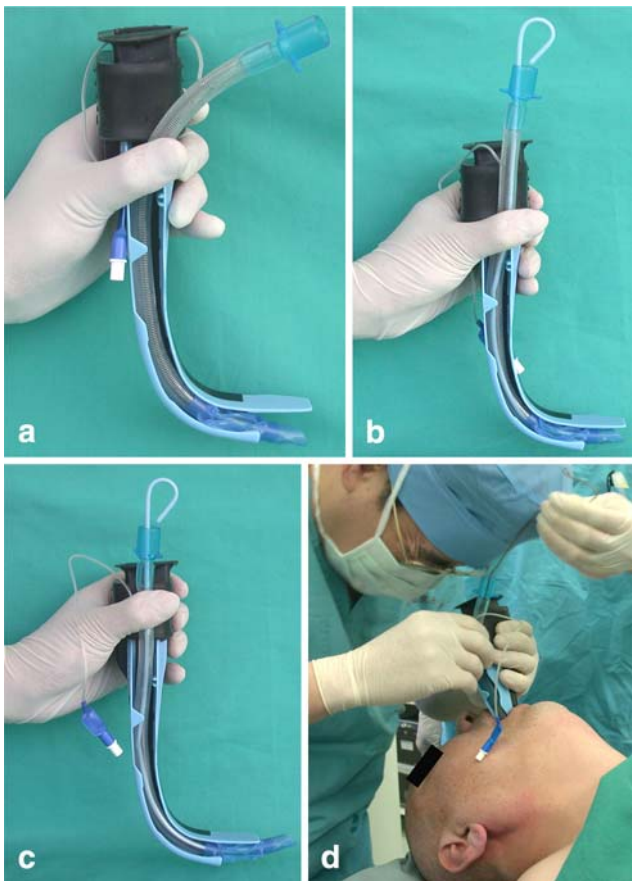

Fig. 1 **a** Having advanced forward from the Airtraq® laryngoscope blade, the reinforced endotracheal tube (ETT) proceeds downwards due to a space between the ETT and the device tip. **b** The distal end of the reinforced ETT with an intubating stylet is angled slightly upwards and placed at a position close to the tip of the Airtraq® laryngoscope. **c** With the aid of an intubating stylet, the reinforced ETT advances from the Airtraq® laryngoscope blade in a slightly upward direction and is guided into the glottis. **d** After the reinforced ETT tip has passed the glottis, the intubating stylet is withdrawn

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angled upwards very slightly and then placed at a position close to the tip of the Airtraq® laryngoscope (Figure 1, Panel B). After the glottis is visualized with the Airtraq® laryngoscope, the styletted reinforced ETT is advanced and inserted into the glottis under direct vision on the viewfinder (Figure 1, Panel C). When it is confirmed that the reinforced ETT tip has passed the glottis, the intubating stylet is withdrawn (Figure 1, Panel D), and the reinforced ETT is then advanced downward into the trachea.

This method had been used successfully to complete tracheal intubation in 17 patients at our centre after the first intubation attempt using the Airtraq® laryngoscope with the reinforced ETT failed due to posterior placement of the ETT tip. Also, we have found that using a styletted reinforced ETT can avoid the need for an anterior curvature of the proximal portion of the reinforced ETT. In this way, the impact on the anterior chest wall from inserting the Airtraq® laryngoscope is minimized, especially for patients with a barrel chest, obesity, short neck, or limited head and neck movement. However, to facilitate smooth advancement of the reinforced ETT, a flexible stylet and an adequately lubricated tube conduit of the Airtraq® laryngoscope are essential.

Conflicts of interest None declared.

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