Tracheal intubation using the GlideScope® with a combined curved pipe stylet, and endotracheal tube introducer

To the Editor:
The GlideScope® (Diagnostic Ultrasound, Bothell, WA, USA) videolaryngoscope provides an enhanced view of the glottis, and increases the likelihood of tracheal intubation compared with direct laryngoscopy in patients with a difficult airway.\(^1\) However, it has been well demonstrated that providing a good view of the glottis does not always correlate with successful airway instrumentation. The limitation of the GlideScope® in advancing the endotracheal tube (ETT) through the vocal cords into the trachea has been well described.\(^2,3\)

The manufacturer recommends using a stylet to curve the ETT and guide it into the larynx, but it remains difficult on occasion to negotiate the ETT through the vocal cords into the trachea. The bevel of the ETT may become stuck at the arytenoids, or impact on the anterior wall of the larynx. It has been suggested that a flexible stylet which would allow for the adjustment of the tube might decrease intubation times and increase the success rate.\(^4\)

It has been shown previously that the Muallem ETT introducer (METTI; VBM Medizintechnik GmbH, Sulz, Germany), which is characterized by a semi rigid flexible body and a soft curved tip, is effective in guiding the ETT into the glottis and facilitating tracheal intubation.\(^5\) A curved brass pipe stylet (5 mm internal diameter) is made through which the METTI size 12 F is introduced. The ETT is slipped over the pipe stylet, thus making an assembly of an introducer, stylet, and tube, as shown in the Figure.

When the glottic inlet is visualized by the GlideScope®, the combined ETT, pipe stylet, and introducer are introduced into the pharynx facing the glottis. The METTI introducer is advanced inside the pipe stylet to target the glottis. Because it has a soft curved tip and semi rigid body, the introducer tip can be easily rotated and pushed via the glottis into the trachea. Once the introducer is pushed deep within the trachea, the ETT is railroaded over the introducer into the trachea. If the ETT becomes stuck at the arytenoids, it can be rotated 90° counter clockwise so that its bevel faces posteriorly, after which it is railroaded over the introducer into the trachea.\(^6\)

We have successfully used the technique described to facilitate tracheal intubation in four patients with difficult airways (Cormack-Lehane laryngeal grades...