How Does the Flex-It Stylet Perform in GlideScope Laryngoscopy?

Time to intubation was faster with a malleable stylet than with the Flex-It stylet.

The GlideScope video laryngoscope consistently provides an excellent glottic view, but advancing the endotracheal tube can be challenging because of the sharp angulation of the blade. To overcome this difficulty, use of a properly shaped stylet is imperative. In a prior study, no difference in performance was reported between a manually shaped stylet and a commercially available rigid GlideScope-specific stylet (JW Emerg Med Dec 7 2007). Researchers in Canada compared performance of the commercially available Flex-It stylet — a plastic device with a mechanism that allows continuous adjustment of the curvature of the endotracheal tube — with a malleable stylet that was bent at a 90° angle 8 cm from the distal end of the endotracheal tube.

Eighty patients who required intubation for elective surgery were randomized to GlideScope laryngoscopy with the Flex-It or a malleable stylet. Median time to intubation was shorter in the malleable-stylet group than in the Flex-It stylet group (32 vs. 41 seconds). Operators rated ease of intubation as similar in the two groups (median scores on a 100-mm visual analog scale, 15 and 20 for the malleable and Flex-It stylets, respectively). Cormack-Lehane grade I or II glottic views were obtained in all patients. Intubation with the Flex-It stylet failed in three patients and was subsequently successful in two patients using the malleable stylet with the GlideScope and in one patient using direct laryngoscopy with a Macintosh 3 blade and a malleable stylet.

Comment: In GlideScope laryngoscopy, the challenge remains to find a commercially available stylet that outperforms the traditional malleable stylet. However, operators should be aware that the optimal stylet shape is different than that for traditional laryngoscopy; as in this study, the stylet should be bent to match the curvature of the GlideScope.

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