WuScope Improves View in C-Spine Immobilized Intubations

Intubation during c-spine immobilization is inherently more difficult because of decreased glottic visualization. The WuScope is a rigid, fiberoptic laryngoscope designed to facilitate visualization and tracheal intubation without neck extension. In a randomized study, these authors compared the WuScope and conventional laryngoscopy with a Macintosh blade in 87 c-spine immobilized patients undergoing elective anesthesia.

Manual in-line stabilization was maintained during intubation. Successful intubation occurred in 95% of patients in the WuScope group and 93% in the conventional laryngoscopy group. There was no difference in the number of attempts. Median time to intubation was longer in the WuScope group (30 vs. 24 seconds, respectively). On a previously described but unvalidated intubation difficulty scale derived from 7 parameters, a score of 0 (ideal intubation) was assigned to 79% of patients in the WuScope group and only 18% in the conventional group. A Cormack view of grade 3 (only epiglottis seen) or 4 (epiglottis not seen) was present in 2% of the WuScope group and 39% of the conventional group.

Comment: Persistent fogging and inability to advance the endotracheal tube led to failures in the WuScope group. Presence of blood and secretions may further limit its use in trauma patients. The WuScope may be considered another alternative for difficult-to-visualize intubations, but it cannot be recommended as a first-line replacement for conventional laryngoscopy in c-spine immobilized patients. The WuScope has not been compared with other difficult airway devices, especially the Bullard laryngoscope, and its cost ($9800) may be prohibitive.

— RJ Vissers, MD

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