

Lighted Stylet for Difficult Intubation

A lighted stylet outperformed direct laryngoscopy in patients with high Mallampati scores.

Mallampati scores of 3 (only soft palate and base of uvula visible) or 4 (only hard palate visible) predict difficult direct laryngoscopy. Researchers in Korea randomized 60 elective anesthesia patients with Mallampati scores of 3 to undergo intubation with either a lighted stylet (Surch-Lite) or a direct laryngoscope with a Macintosh blade. After induction of general anesthesia and neuromuscular paralysis, senior anesthesia residents who had performed at least 200 intubations using each device attempted intubation a maximum of two times.

Intubation was successful on the first attempt in significantly more patients in the stylet group than in the direct-laryngoscopy group (29 of 30 vs. 24 of 30). Mean time to intubation was shorter in the stylet group (12 vs. 17 seconds). Intubation failed after two attempts in two patients in the direct-laryngoscopy group; both patients were subsequently intubated by an attending anesthesiologist — one patient with the use of a direct laryngoscope and the other with the use of a lighted stylet after a third failed attempt using direct laryngoscopy. Both patients were excluded from further analysis per protocol. The increase in mean arterial blood pressure from preintubation baseline to postintubation peak was significantly higher in the direct-laryngoscopy group than in the stylet group (38 vs. 20 mm Hg), as was the mean increase in heart rate (25 vs. 16 beats/minute, respectively). Complications, principally postoperative throat discomfort, did not differ statistically between groups.

Comment: A lighted stylet is one of many devices that can be used for intubation in patients with difficult airways ([JW Emerg Med Dec 19 2008](#)). A better, but more-costly approach, is video laryngoscopy ([JW Emerg Med Apr 27 2005](#) and [JW Emerg Med Jan 23 2009](#)), which almost eliminates poor laryngoscopic views. The time has come to abandon use of direct laryngoscopy, a practice that persists despite availability of clearly superior instruments.

— **Ron M. Walls, MD, FRCPC, FAAEM**

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Rhee K-Y et al. A comparison of lighted stylet (Surch-Lite™) and direct laryngoscopic intubation in patients with high Mallampati scores. *Anesth Analg* 2009 Apr; 108:1215.

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