GlideScope Blade Size Affects Glottic Visualization for Difficult Pediatric Intubations


Laryngoscopic views were best with a GlideScope blade one size smaller than the weight-appropriate blade size.

To determine the effect of GlideScope blade size on laryngoscopic view in children with difficult airways, researchers in Korea enrolled 23 patients (mean age, 8 years) with modified Cormack and Lehane grade glottic views ≥3a (epiglottis visible and can be lifted) by Macintosh direct laryngoscopy, with and without the BURP maneuver (JW Emerg Med Apr 13 2005). Patients underwent GlideScope laryngoscopy with both a weight-appropriate–sized blade and a blade one size smaller, in random order. One experienced attending anesthesiologist performed all laryngoscopies, with and without the BURP maneuver.

Median glottic views without the BURP maneuver were grade 4 with direct laryngoscopy, 3b (epiglottis can be seen but not elevated) with the weight-appropriate GlideScope blade, and 1 with the smaller GlideScope blade. All glottic views with the smaller GlideScope blade were grade 2b or 1. There were no significant differences in glottic views between direct laryngoscopy and the weight-appropriate GlideScope blade, but the smaller GlideScope blade improved the views by at least 2 grades compared with either of the other two methods. The BURP maneuver improved laryngoscopic views by a median of 0.5 in each group.

Comment: Size is important. The size of the GlideScope determines both the length of the blade and the position of the camera. Most GlideScope glottic views are excellent. If not, even when tilting (not lifting) the blade, try a smaller-size GlideScope, which will facilitate a more “anterior” view, or a larger one if the blade tip can't reach the vallecula.

Citation(s): Lee J-H et al. A comparative trial of the GlideScope® video laryngoscope to direct laryngoscope in children with difficult direct laryngoscopy and an evaluation of the effect of blade size. Anesth Analg 2013 May 17; [e-pub ahead of print]. (http://dx.doi.org/10.1213/ANE.0b013e318292f0bf)