

July 29, 2016

A Partial Glottic View Improves GlideScope Intubation

Calvin A. Brown, III, MD, FAAEM

In this randomized clinical trial, GlideScope intubations were faster and easier when a restricted glottic view was used.

Intubation with hypercurved video laryngoscopes (VLs) often takes longer to complete because of the challenge of manipulating the endotracheal tube through the glottic opening. With direct laryngoscopy, a full glottic view optimizes intubation speed and success. It is unclear whether this relationship is true for hyper-angulated VLs.

Investigators randomized 163 patients undergoing elective surgery to GlideScope intubation with either a full or restricted glottic view (100% vs. <50% on the percentage of glottic opening [POGO] scale). Excluded were patients younger than 18 years or older than 75, as well as those who were morbidly obese or pregnant, required awake intubation techniques or rapid sequence induction, or had known predictors of difficult video laryngoscopy. All patients were intubated by clinicians who had each performed more than 50 VL intubations. The primary outcome was total time to intubation. Secondary outcomes included first attempt intubation success and a subjective assessment of intubation ease using a 100-point visual analog scale (VAS) tool with one representing no difficulty.

In the group with the restricted glottic view, compared with the full view, the median time to complete intubation was shorter (27 vs. 36 seconds) and intubation was rated easier (median VAS score, 14 vs. 50). First attempt intubation success was similar in the two groups (99% and 95%).

Comment: With angulated VLs, a full glottic view may not be the best view for intubation — nor is it required, for that matter. Although the difference in median intubation time between the full-view and restricted-view groups was small, an easier and more rapid intubation is often required in emergency patients. In such cases, emergency physicians should intubate the view they see, full or partial.

Citation(s):

Gu Y et al. A deliberately restricted laryngeal view with the GlideScope® video laryngoscope is associated with faster and easier tracheal intubation when compared with a full glottic view: A randomized clinical trial. *Can J Anaesth* 2016 Aug; 63:928.

(<http://dx.doi.org/10.1007/s12630-016-0654-6>)

Copyright © 2016. Massachusetts Medical Society. All rights reserved.