GlideScope Provides Better Glottic Views Than Direct Laryngoscopy

In this meta-analysis, the GlideScope also was associated with faster intubation times and higher first-attempt success rates among nonexpert operators.

Researchers performed a meta-analysis of randomized studies that compared the GlideScope video laryngoscope with direct laryngoscopy regarding glottic view, first-attempt intubation success rates, and intubation times in adult patients. Seventeen studies involving a total of 1998 patients were included in the analysis.

Glottic view (Cormack-Lehane grade I vs. ≥grade II) was better with the GlideScope than with direct laryngoscopy overall (relative risk, 2.0) and for nondifficult intubations (RR, 1.5) and simulated difficult intubations (manual in-line stabilization; RR, 3.5). Among nonexpert operators, the rate of first-attempt intubation success was higher (RR, 1.8), and intubation time was faster (weighted mean difference, 43 seconds) with the GlideScope than with direct laryngoscopy; no success or time differences were observed among expert intubators.

Comment: Glottic visualization was better with the GlideScope than direct laryngoscopy, especially for patients with simulated difficult airways. Nonexpert operators likely had faster and more-successful intubations with the GlideScope because the GlideScope technique is easier to master than direct laryngoscopy. This meta-analysis provides yet another convincing piece of evidence supporting use of video laryngoscopy over conventional direct laryngoscopy.

— Cheryl Lynn Horton, MD, and Ron M. Walls, MD, FRCPC, FAAEM

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