Airway Scope vs. GlideScope in Patients with Normal Anatomy

Intubation with the Pentax Airway Scope was faster and easier.

The Pentax Airway Scope (AWS) and GlideScope video laryngoscopes have different blade shapes and systems for tube management. A recent study that compared ease of use and time to intubation for the two devices in patients with cervical spine immobilization showed advantages of the AWS (JW Emerg Med Jul 24 2009). In the current randomized study, researchers compared intubating characteristics of the two devices in 140 healthy patients with normal airway anatomy who were undergoing routine surgery. Intubations were performed by anesthesiologists who were skilled in both techniques.

Investigators recorded time to intubation, evidence of trauma related to laryngoscopy, incidence of esophageal intubation, and incidence of postoperative sore throat. Intubation was faster with the AWS than with the GlideScope (mean, 21 vs. 30 seconds). Maneuvers to reorient the scope were required to optimize glottic visualization in 13% of patients in the GlideScope group compared with none in the AWS group. The reported incidence of mucosal bleeding, lip bleeding, and postoperative sore throat also favored the AWS.

Comment: These findings, like those from other recent studies, suggest that the integrated tube channel of the Pentax Airway Scope shortens time to intubation. However, the time saving in this study (<10 seconds) is not likely clinically significant. The different available video laryngoscopes have distinct attributes and features, and none is a clear winner. Clinicians should try each one and determine which seems easiest and most intuitive to use.

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