Airway Scope vs. GlideScope

Intubation is faster with the Airway Scope in patients with C-spine immobilization.

The Pentax Airway Scope (AWS) and the GlideScope are high-resolution video laryngoscopes with a fundamental difference: The AWS has an integrated channel designed to help guide the tracheal tube through the glottis. Previous studies have shown that video laryngoscopy provides advantages over direct laryngoscopy (JW Emerg Med Mar 14 2008), but few studies have directly compared video laryngoscopes. These authors randomized 70 adult patients who required intubation for routine surgery to undergo intubation with the AWS or GlideScope with manual in-line cervical immobilization. All intubations were performed by anesthesiologists skilled in both techniques.

Time to intubation was significantly shorter with the AWS than with the GlideScope (34 vs. 72 seconds). Intubation was completed in less than 1 minute significantly more often with the AWS than with the GlideScope (94% vs. 63%). Four patients in the GlideScope group (11%) could not be intubated (with either the GlideScope rigid stylet or bougie); no intubation failures occurred in the AWS group. The authors conclude that the integrated tube channel of the AWS enables faster intubation.

Comment: In generally healthy adults without cervical spine disease or injury, the integrated tube channel of the AWS might offer advantages over the GlideScope for intubation. Of note, the AWS is available only in adult sizes, and the tube channel might make the scope too big to insert in patients with limited interincisor opening. We need further study to determine whether one video laryngoscope offers advantages over the others in particular clinical situations. However, we do not need further study to know that video laryngoscopy is superior to conventional direct laryngoscopy.

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