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Standard GlideScope Outperforms the Cobalt GlideScope in the ED

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The standard GlideScope had greater intubation success and fewer image problems than its single-use cousin.

While video laryngoscopy outperformed direct laryngoscopy in a number of studies ([NEJM JW Emerg Med Jun 7 2013](#), [NEJM JW Emerg Med Jun 1 2012](#)), there have been few studies comparing different video laryngoscopes ([NEJM JW Emerg Med Feb 22 2013](#)), and fewer still comparing different versions of the same video laryngoscope. In a retrospective database analysis, researchers compared performance of the standard GlideScope video laryngoscope and the Cobalt GlideScope, which incorporates a disposable plastic blade and cover over a flexible video baton. The analysis included all adults intubated using either device in the emergency department of a Level I trauma center over a 6-year period.

Most intubations were performed by second- and third-year residents. Of 583 patients, 79 (14%) were intubated using the Cobalt GlideScope. First-pass success (81% vs. 58%) and ultimate success (92% vs. 72%) were significantly higher with the standard device. Although Cormack-Lehane views were not significantly different between the two devices, the standard device was significantly less likely to have lens fogging (33% vs. 60%) and lens contamination (5% vs. 22%).

Comment: In an emergency department setting, the Cobalt GlideScope did not measure up to the original GlideScope. These findings are likely explained by design differences between the two devices — a single piece with a heating element to prevent fogging versus two pieces with a heating element on only one, and a more-recessed camera placement on the standard device. Although single-use devices avoid the challenges of sterilization, the original GlideScope is a clear choice over its Cobalt cousin.

Citation(s):

Sakles JC et al. Comparison of the reusable standard GlideScope® videolaryngoscope and the disposable Cobalt GlideScope® videolaryngoscope for tracheal intubation in an academic emergency department: A retrospective review. *Acad Emerg Med* 2014 Apr; 21:408.

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