Failed Intubation Attempt in the ED? Switch to Video Laryngoscopy

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After an initial failure, emergency department intubators were more successful with the C-MAC video laryngoscope than with a direct laryngoscope, regardless of which device was used initially.

Although video laryngoscopy has repeatedly been shown to be superior to direct laryngoscopy (NEJM JW Emerg Med Mar 21 2014, NEJM JW Emerg Med Oct 1 2010, and NEJM JW Emerg Med Jun 7 2013), there has not yet been any specific directive instructing emergency department (ED) intubators to use video laryngoscopy primarily. In a study of adult intubations at a single ED over a 5-year period, researchers compared second-attempt (rescue) success rates with the C-MAC video laryngoscope (VL) versus a direct laryngoscope (DL). The authors included only intubations in which the same operator performed the initial and second attempt.

Among 398 cases, the C-MAC was used for the second attempt in 141 and the DL in 94. Success rates were higher when the second attempt was performed with the C-MAC than the DL (82% vs. 62%). Findings were similar after adjustment for potential confounders and regardless of which device was used initially. Among patients whose first attempt had been with a C-MAC, success rates were 85% when the second attempt was also performed with a C-MAC, versus 50% with a DL. Similarly, among patients whose first attempt had been with a DL, second attempts were successful in 78% with the C-MAC versus 63% with a DL.

Comment: There is clearly more than sufficient evidence to support using a VL as the primary intubating device. Intubators still clinging to the DL for initial attempts at intubation should have a VL ready – and be familiar with its use – in case first attempts fail. Of course, if a VL is available as backup device, it would have been better off used as a primary device, making the need for a backup device moot. If you have a VL, learn to use it as a primary device. There are no reasonable excuses left.

Citation(s):

Sakles JC et al. The C-MAC® video laryngoscope is superior to the direct laryngoscope for the rescue of failed first-attempt intubations in the emergency department. J Emerg Med 2015 Dec 11; [e-pub ahead of print].
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