Rise in Video Laryngoscopy Has Not Affected Rates of Awake Intubation

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In this retrospective review at a single center, use of video laryngoscopy increased significantly over time, but the rate of awake intubation remained constant.

Awake intubation is used when glottic visualization with a laryngoscope and rescue mask ventilation are anticipated to be significantly difficult. It involves the use of topical anesthesia and sedation to facilitate intubation without full induction, decrease in respiratory drive, or paralysis. Many cases are managed with a flexible intubating bronchoscope. The improved glottic exposure conferred by video laryngoscopy may reduce the degree of intubation difficulty in a patient who would have otherwise been considered difficult with conventional laryngoscopy, and may lower an operator’s threshold for rapid sequence intubation (induction and neuromuscular blockade). To assess whether rates of awake intubation have changed since the advent of video laryngoscopy, researchers reviewed 146,252 surgery cases performed under general anesthesia at a Canadian tertiary care academic center between 2002 and 2013.

The rate of video laryngoscope use increased more than 100-fold during the study period, from 0.1% in 2002 to 11% in 2013. During this period, the annual incidence of awake intubations remained constant, at around 1%. Of 1554 awake intubations, 35% were performed in patients undergoing otolaryngology or cervical spine procedures, and 99.2% were managed with a flexible bronchoscope.

Comment: Although video laryngoscopy is transforming airway management in the operating room and emergency department, it has not eliminated the need for caution when significant airway difficulty is present. There will always be patients who are optimally managed awake with a flexible bronchoscope, and emergency physicians should remain competent with awake techniques.

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