



Reflections on the changing scope of difficult airway management

Dario Caldiroli, MD · Eleonora Orena, MSc ·
Paolo Cortellazzi, MD

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To the Editor,

The correspondence from Wanderer *et al.*¹ is of great interest and highlights the usefulness of guidelines in clinical decision-making for difficult airway management. Their longitudinal data from a single institution show how difficult airway management may improve by following implementation guidelines. Nevertheless, this work also raises several questions. First, while the relationship between the introduction of the video laryngoscopes (VLS) and an increase in their utilization may seem intuitive, it is not as obvious why these authors report a reduction in the rate of fiberoptic intubations (FOI). Is it possible that VLS reduced the incidence of difficult intubations or that anesthesiologists have become more confident in rescuing an expected difficult intubation with VLS or supraglottic airways (SGAs)?

Second, the use of an Eschmann® tracheal tube introducer (gum elastic bougie) has increased with both direct laryngoscopy (DL) and VLS. It is understandable that these devices were used in cases of suboptimal glottic exposure, as often occurs during DL, but it is unclear why the use of bougies should also increase in cases of improved glottic visualization as with VLS.² Is it because there are difficulties introducing the endotracheal tube toward the vocal cords when visual-motor coordination is still poor, and therefore proficiency has not yet been achieved?

A third issue relates to the increased use of SGAs. One hypothesis is that this is a consequence of a decision to use SGAs as a first-line device. There is also a possibility that increased use of SGAs may have resulted, in part, as a

consequence of failed attempts to rescue a difficult intubation or difficult ventilation.

Finally, the reported incidence of difficult intubation in the two quarters that were analyzed was consistently greater with the use of SGAs than with endotracheal tubes (0.06% vs 0.03%, respectively and 0.019% vs 0.009%, respectively). It is challenging to assess whether or not this result was because placing a SGA is not as easy as it seems.^{3,4} Unfortunately, as the authors state in their report, assessment of the degree of difficulty in airway management depended solely on subjective experience, which may have affected the results. We anticipate that these questions will be answered in due course, as these types of retrospective analyses are extended to other institutions.

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Conflict of interest None declared.

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D. Caldiroli, MD (✉) · E. Orena, MSc · P. Cortellazzi, MD
Department of Neuroanesthesia and Intensive Care, Fondazione
IRCCS Istituto Neurologico C. Besta, Milan, Italy
e-mail: dcaldiroli@istituto-besta.it

Reply,

We thank Dr. Caldiroli *et al.* for their interesting comments on our recently published letter regarding the changes in airway management observed over time at our institution.¹ Based on our retrospective analysis, we are not able to determine if the reduction in the reported incidence of difficult intubations is due to an overall reduced incidence or an increasing confidence in rescuing an expected difficult intubation.

We did not characterize the skill level of the providers who experienced difficulty with a video laryngoscope (VLS), so we are unable to comment on their levels of visual-motor coordination. Our institution does have a high rate of utilizing an Eschmann® tracheal tube introducer (bougie), reflecting a local practice pattern of using a bougie whenever any difficulty is experienced passing an endotracheal tube. This practice may decrease the rate of traumatic injuries associated with using a VLS with less flexible stylets.²⁻⁵

Regarding the use of supraglottic airways, it seems that these airways are being chosen as first-line devices at our institution. A manual review of the airway commentary revealed few instances where these airways were being used as rescue devices.

We agree that it is challenging to make inferences from subjective judgment of difficult airways and welcome analyses of data from other institutions to provide additional context for the trends we observed.

Competing interests None declared.

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Jonathan P. Wanderer, MD

Jesse M. Ehrenfeld, MD

Warren S. Sandberg, MD, PhD

Department of Anesthesiology, Vanderbilt University, Nashville, TN, USA

Jesse M. Ehrenfeld, MD

Warren S. Sandberg, MD, PhD

Department of Biomedical Informatics, Vanderbilt University, Nashville, TN, USA

Jesse M. Ehrenfeld, MD

Department of Surgery, Vanderbilt University, Nashville, TN, USA

Richard H. Epstein, MD

Department of Anesthesiology, Jefferson Medical College, Philadelphia, PA, USA