Double Trouble ... Less Often

To the Editor:
Thanks to Kheterpal et al.1 for their study on the incidence of concurrent difficult laryngoscopy and difficult mask ventilation. In their database series of 177,000 cases, both airway maneuvers were difficult in 0.4% of patients.

This rate is alarmingly high. Even worse, it may be an underestimate because the study excluded patients who were predicted to be difficult and offered alternative techniques.

Inevitably, the definitions used are important when interpreting these results.

First, mask ventilation was assessed using the Han scale: grades 3 or 4 were defined as “difficult.” Han et al.2 defined grade 3 as mask ventilation, which was “inadequate, unstable, or requiring two operators,” and grade 4 as “impossible.” These two grades cover a broad range of clinical significance. The need for a second operator is mild inconvenience compared with the potential crisis of a flat-line capnograph.

Second, two methods were used to assess laryngoscopy: the Cormack and Lehane grade and the number of attempts. Grades 3 and 4, or four attempts, constituted “difficulty.” Again, this definition spans a wide range of significance. An epiglottis-only view with easy bougie-guided intubation is far less serious than a grade 4 view or three failed attempts.

Furthermore, the Cormack and Lehane scale describes an objective endpoint—the best view at laryngoscopy. However, there is a marked variation between operators in both knowledge of that scale and reproducibility of grading.3,4 Observer variation is likely to be even greater with the Han scale, which is subjective and operator dependent.5

Next, the authors note that data on dose and timing of muscle relaxation were unavailable, but assert that this does not influence the Han grading of mask ventilation. That claim is questionable.

Finally, it is striking that the list of risk factors identified does not include a history of difficult intubation or mask ventilation. When it is available, clinicians routinely draw on that history to predict difficulty and plan anesthetic technique. It seems likely that such good clinical practice was used in the authors’ institutions and thus excluded cases from their cohort.

Perhaps a further implication of this study is the persistent need for a uniform and objective method to assess mask ventilation and describe it to future clinicians. A better anesthetic history could help to plan a safer future anesthetic.

Competing Interests
The author declares no competing interests.

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References

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