



Can a new scoring system reliably predict failed facemask ventilation?

Hans-Joachim Priebe¹

Received: 19 April 2020 / Accepted: 9 May 2020
© The Author(s) 2020, corrected publication 2021

Keywords Airway management · Facemask ventilation · Scoring system

To the Editor:

I read with interest the publication by Saito et al. [1]. A couple of clarifications would be welcomed.

The data do not necessarily support the authors' conclusion that the new scoring system can predict failed facemask ventilation (FMV). The positive predictive values (PPV) of low and high-risk scores for failed FMV are 5.6% and 0.004%, respectively. Such low PPVs can hardly be considered clinically useful in predicting failed FMV. In general, whenever the incidence of an event is very low (like in the case of failed FMV), the PPV will always be low, and the negative predictive value (NPV) high.

In 13 of the 20 cases of failed FMV, a supraglottic airway was successfully inserted. Such 65% success rate seems to contradict the authors' view that the proposed scoring system is also useful in predicting difficult insertion of, or ventilation through a supraglottic airway.

Specific description of the characteristic of failed FMV and of the clinical management (e.g., expertise of anesthesiologist, head positioning, anesthetic technique and depth, use of neuromuscular blocking drug) of those 20 patients with failed FMV would be very helpful. For example, administration of a neuromuscular blocking drug (NMBD) immediately following induction of anesthesia tends to facilitate FMV [2]. It would thus be clinically relevant to know whether NMBDs had been administered before any attempt at FMV, and before attempt at insertion of a supraglottic airway after FMV had failed.

Acknowledgements Assistance with the study: none.

Funding Open Access funding enabled and organized by Projekt DEAL.

Compliance with ethical standards

Conflict of interest The author declares no conflict of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

1. Saito T, Asai T, Taguchi A, Sophia CTH, Liu W, Thinn KK, Ti LK. Prediction of failed facemask ventilation: new scoring system for difficult airway. *J Anesth*. 2020. <https://doi.org/10.1007/s00540-020-02761-3> [Epub ahead of print].
2. Priebe H-J. Should anesthesiologists have to confirm effective facemask ventilation before administering the muscle relaxant? *J Anesth*. 2016;30(1):132–7.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This comment refers to the article available online at <https://doi.org/10.1007/s00540-020-02761-3>.

✉ Hans-Joachim Priebe
hans-joachim.priebe@uniklinik-freiburg.de

¹ Department of Anesthesiology and Critical Care, Medical Center University of Freiburg, Hugstetter Straße 55, 79095 Freiburg, Germany