

Airway spray efficacy of local anesthetic with fiberscope

Masanori Tsukamoto¹ · Jun Hirokawa¹ · Takeshi Yokoyama²

Received: 1 April 2017 / Accepted: 13 April 2017 / Published online: 22 April 2017
© Japanese Society of Anesthesiologists 2017

To the Editor:

Fiberscope intubation is a useful airway technique, but it is important to decrease the discomfort and hemodynamic disturbances of patients undergoing fiberscope intubation [1]. In addition, effective topical anesthesia may lead to a reduced requirement for anesthetics. However, there is no consensus on methods for administering topical anesthesia [2]. The main aim of our study was to achieve better conditions when administering topical anesthesia through the working channel of a fiberscope by spraying using various syringes. We evaluated three syringes of different sizes and three different liquids containing indigocarmine (Daiichi Sankyo, Tokyo, Japan); the remaining space of the syringe was filled with air. The contents were sprayed through the channel of the fiberscope, followed by an air flush. The area sprayed via the fiberscope using a 5-ml syringe filled with 2 ml liquid and 3 ml air was significantly larger than that achieved using the other size syringes. The study was limited in that it involved a manikin model; further studies

involving a human and varying the viscosity of the liquid may be required.

References

1. Rosenstock CV, Thøgersen B, Afshari A, Christensen AL, Eriksen C, Gätke MR. Awake fiberoptic or awake video laryngoscopic tracheal intubation in patients with anticipated difficult airway management: a randomized clinical trial. *Anesthesiology*. 2012;116(6):1210–6.
2. Wang YH, Xue FS, Li HX. Airway spray efficacy of local anesthetic with fiberscope. *J Anesth*. 2017;27. doi:[10.1007/s00540-017-2340-4](https://doi.org/10.1007/s00540-017-2340-4).

This reply refers to the article available at doi:[10.1007/s00540-017-2340-4](https://doi.org/10.1007/s00540-017-2340-4).

✉ Masanori Tsukamoto
tsukamoto@dent.kyushu-u.ac.jp

Jun Hirokawa
hj8823@dent.kyushu-u.ac.jp

Takeshi Yokoyama
yokoyama@dent.kyushu-u.ac.jp

¹ Department of Dental Anesthesiology, Kyushu University Hospital, 3-1-1 Maidashi, Higashi-ku, Fukuoka 812-8582, Japan

² Department of Dental Anesthesiology, Faculty of Dental Science, Kyushu University, Fukuoka, Japan