Letter to the Editor

The use of Trachway for electromyographic (EMG) tube placement

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Dear Editor,

We have read with great interest the article authored by Chang *et al*. (1) describing the use of Trachway video-intubating stylet (Biotronic Instrument Enterprise Ltd., Tai Chung, Taiwan) to facilitate electromyographic (EMG) tube placement in patients undergoing monitored thyroidectomy. In their study, the incidence of difficult intubation was significantly lower with Trachway than that with direct laryngoscopy (2.7% *vs*. 6.5%, P=0.01). Chang *et al*. concluded that Trachway is useful and helpful in reducing EMG tube intubation difficulty. We are indebted to the authors for their willingness to share their experience. Based on the reported data, there are several issues remaining to be addressed.

Firstly, the classical predictive criteria (e.g., mouth opening <35 mm, short neck, Mallampati III or IV, neck mobility <80 degrees, a retrognathic mandible, and thyromental distance <65 mm) have been reported to be significantly reliable risk factors for difficult intubation in patients undergoing thyroid surgery (2). Although this is important information enabling the readers to recognize the level of difficulty in airway intubation in both groups (i.e., Trachway and Laryngoscope groups), it was unavailable in that retrospective study. Secondly, since our previous experience has shown that Trachway is a very useful device for difficult airway management (3,4), it remains unclear regarding the causes of failure of using this device in airway management in two cases in Chang *et al*.'s study. Besides, since it is well-documented that the success rate of difficult airway management is much higher for Trachway compared to that for conventional laryngoscopy (5,6), the use of laryngoscopy as the rescue measures in the two cases is paradoxical. Providing this information for the readers would be important for their recognition of the limitations of Trachway in airway management. Thirdly, fiberoptic nasal intubation with EMG endotracheal tube was performed in two patients with large thyroid cancers in the Laryngoscope group that precluded conventional laryngoscopic intubation in Chang *et al*.'s study. Since it has been recently demonstrated that the use of intraoperative neuromonitoring does not decrease the rate of postoperative recurrent laryngeal nerve palsy during thyroid surgery (7) and taking into account the increased risk of nasal trauma with EMG endotracheal tube because of its wider diameter compared to that of a standard endotracheal tube, immediate establishment of the airway using conventional nasal endotracheal tube would be a less traumatic and more reasonable approach in this setting.

Finally, it is recommended that the exposed electrodes of the EMG tube should be in contact with the vocal cords. In Chang *et al*.'s study, the position of the EMG tube was confirmed by fiberscope in both groups. In this aspect, not only can Trachway allow the operator to visualize the position of the EMG tube after intubation, but it can also show the image on its screen for multiple views to confirm the tube position. Therefore, we suggest that Trachway would be enough for serving this purpose without recourse to fiberscopy.

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Footnote

Conflicts of Interest: The authors have no conflicts of interest

to declare.

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