Laryngeal Tube[®] pilot balloon kinking in the presence of a bite block

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To the Editor,

Supraglottic airway devices are being developed with increasing frequency following the overwhelming success of the Laryngeal Mask Airway[®] (LMA). The LMA, the ProSeal[®] Laryngeal Mask Airway (PLMA), the Laryngeal Tube[®] (LT), the Laryngeal Tube[®] with integrated suctioning (LTS) and the Esophageal Tracheal Combitube[®] (OTC) are currently the most evaluated and widespread supraglottic airway devices.¹

The Laryngeal Tube[®] (VBM Medizintechnik, Sulz, Germany) is a relatively new supraglottic device designed to secure a patent airway during either spontaneous breathing or controlled ventilation.² The manufacturer's standard LT has since been redesigned and modified to incorporate a suction port. The standard LT consists of an airway tube with a small distal cuff attached at the tip and a larger balloon proximal cuff located at the middle part of the tube (Fig. 1). The cuffs are inflated through a single pilot tube and balloon through which inflation pressure can be monitored. There are three black lines on the tube close to a standard 15 mm connector to indicate adequate depth of insertion when aligned with the teeth. The device is inserted while the patient's head and neck are placed either in the sniffing position or in a neutral position. The tip of a well-lubricated LT is placed against the patient's hard palate behind the upper incisors. The device is then advanced through the centre of the mouth until either resistance is felt or the device is almost fully inserted. The

Fig. 1 Laryngeal Tube[®] pilot balloon kinking in the presence of a bite block. Pointer identifies the site where pilot tube is stuck and kinked (A) when the bite block is attached to the Laryngeal Tube[®], (B) bite block with groove where LT is snagged, (C) distal cuff, (D) proximal cuff, (E) pilot balloon

LT is inserted properly when the second bold black line on the tube has just passed between the upper and lower incisors. A bite block is inserted when ventilation is adequate, and the LT is secured in its wedge. Both are fixed in place with an elastic strap supplied with the device set. Once it is correctly placed with the bite block and the provided elastic strap, the LT will maintain its intended position after insertion.

We have used the LT extensively for 3 years in at least 250 cases conducted under general anesthesia in all age groups. The device is used routinely to maintain the patient's airway, either during spontaneous breathing or controlled ventilation. Although the cuff deflator is applied correctly, we have noted each time that the pilot balloon cuff is not deflated immediately before the LT is removed. We have observed that the pilot balloon tube continually slips and tightens in the groove between the LT shaft and the

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inner wall of the bite block when the LT is secured in its wedge (Fig. 1). The unintended clamping of this tube does not allow for cuff deflation, and it becomes problematic when time to remove the device. We caution other clinicians regarding the problem created by the bite block and suggest an alternate site to attach the pilot balloon tube is warranted so that it does not occlude during the time of device extubation and potentially lead to minor complications.

Competing interests None declared.

References

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