

An unrecognised risk in endotracheal intubation by a Truview laryngoscope

Sir,

The Truview EVO™ laryngoscope (Truphatek International Ltd., Netanya, Israel) is a commonly used video laryngoscopy device in both adult and paediatric anaesthetic practice. It is especially useful in preterm or low birth weight neonates in whom conventional laryngoscopy may be difficult due to the anterior location of the larynx.^[1] This laryngoscope has its proprietary stylet (Optishape™ stylet) for proper control of the endotracheal tube during intubation.

While preparing for the anaesthetic induction of a preterm neonate who was to be operated for biliary atresia, we came across a serious issue with the stylet which could have led to a major complication. As a routine practice at our hospital, a preliminary check to ensure the functional status of instruments to be used during induction of anaesthesia is performed. This includes a close inspection of the Truview EVO™ laryngoscope and its stylet as issues with this device have been reported earlier.^[2] During our inspection, we found that when trying to remove the stylet (Optishape No 410000 meant for ETT size 2.5-3.5) [Figure 1] from the endotracheal tube (Size 2.5 uncuffed), the distal wire end of the stylet continued to remain inside the lumen of the endotracheal tube while the proximal part of the stylet came out. As this inspection was being carried out on the anaesthetic table, we were

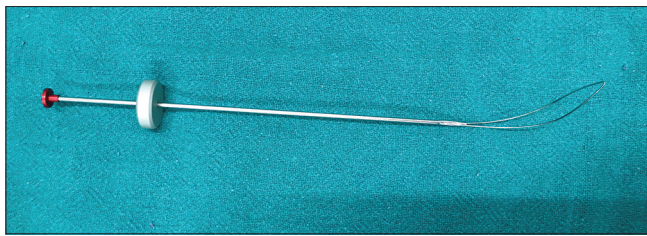


Figure 1: Optishape™ stylet (no. 410000) for ETT size 2.5-3.5

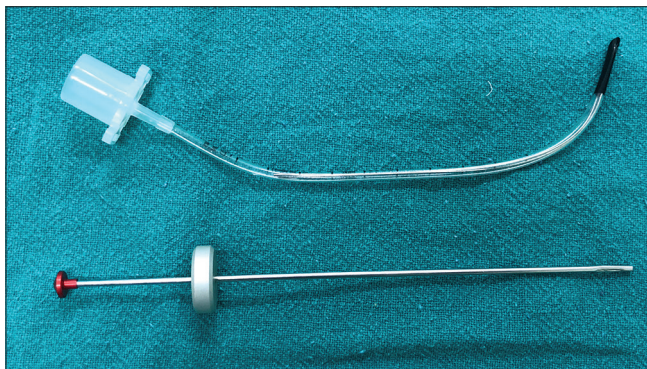


Figure 2: The endotracheal tube (2.5 uncuffed) with the distal wire of the stylet in its lumen and the Optishape™ stylet after removal

able to visualise the distal wire lying within the endotracheal tube [Figure 2]. Had we not performed this test and gone ahead with intubation, this wire would have remained inside the endotracheal tube and subsequently upon ventilation, may have moved down into the airway. As this wire is supposed to be a part of the stylet, the anaesthetic team would not have realised that it had inadvertently introduced a foreign body into the lung. As tracheobronchial foreign bodies are associated with complications like bronchospasm, pneumonia, atelectasis, pneumothorax and potential mortality, this event could have grave consequences and may have required bronchoscopy or surgery for its management.^[3]

Our literature search revealed only one other case of Optishape stylet malfunction in which the authors were unable to withdraw the stylet after intubation.^[2] However, the dislodgement of the stylet wire as observed in our case has not been reported earlier. It is possible that what we experienced was a manufacturing defect peculiar to the stylet supplied to us as this was the very first use of the new stylet, and hence, wear and tear could not explain this event. Although we have informed the manufacturer regarding our experience, it may be beneficial to check the integrity of the stylet by inserting and removing it out of the endotracheal tube

prior to attempting intubation with this device. This can prevent a serious and unforeseen complication of intubation using this device.

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Conflicts of interest

There are no conflicts of interest.

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