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## Potential for foreign body going unnoticed with a disposable fibreoptic laryngoscope

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### EDITOR:

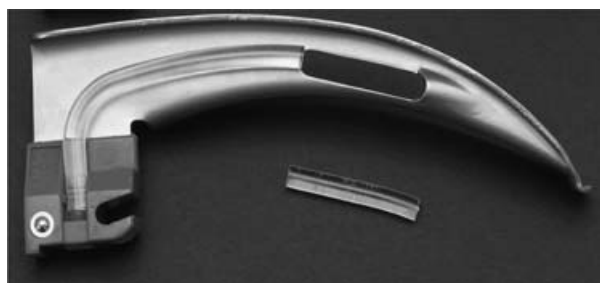
Endotracheal intubation is regarded as the gold standard in advanced airway management. In cases where intubation is foreseen to be straightforward, practitioners would use a Macintosh laryngoscope [1,2] for the purpose of visualization of the larynx and vocal cords. With the inherent risk of transmission [3] of diseases via saliva and lymphatic tissue, the use of 'single use only' [4] laryngoscope blades has become common practice in many hospital departments. We report a case where the routine use of such a blade lead to an unsuspected breakage in the fibreoptic light source with the potential for serious consequences.

### Case report

A 58-yr-old female, ASA Grade II was scheduled for elective mastectomy and sentinel node biopsy as an elective procedure. During preoperative assessment of the airway she was noted to have prominent top incisors, malocclusion of jaws with the upper teeth overriding the bottom set and a thyromental distance less than 6 cm. Mouth opening and neck extension were full. Although some difficulty at

intubation was anticipated, it was not judged to be impossible with routine equipment.

Standard recommended monitoring was applied. After pre-oxygenation, fentanyl 100 µg, propofol 200 mg and atracurium 35 mg were administered. After 3 min, intubation was attempted using a Timesco Surgical and Medical, London, Callisto Macintosh size 3 disposable laryngoscope. Laryngoscopy revealed a Cormack & Lehane grade III view [5] and tracheal intubation could not be performed. The laryngoscope blade was removed under direct vision with the intention of trying a McCoy blade. At this point, a glistening object was noted in the pharynx. This was retrieved using Magill's forceps. On checking the laryngoscope, it became apparent that the light source had fractured and the distal one-third had fallen into the patient's pharynx (Fig. 1).



**Figure 1.**  
The laryngoscope blade with its fractured fibreoptic light path.

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A laryngeal mask was inserted instead and the anaesthetic and operation concluded uneventfully.

The Hospital Risk Management Team was informed. The Hospital users were alerted to the possibility of a manufacturing/faulty batch. Timesco Surgical and Medical Ltd. was informed. The company confirmed that a faulty batch was responsible. A product recall was made on this batch, MHRA Reference No.: 2007/002/006/401/014.

## Discussion

This is the first report of this kind of fault with a Timesco Surgical and Medical size 3 disposable laryngoscope blade. On this occasion, the patient came to no harm. The fragment may have gone undetected with the potential for it to be swallowed or inhaled. The consequences of this would have been far reaching. Also, this could have happened in the hands of advanced airway management practitioners in a different setting like A&E, intensive therapy unit or cardiopulmonary resuscitation where emergency intubation would have made it even more conducive for the fragment to have gone 'missing'.

The remnant of the optical fibre airway imaging system continued to illuminate the pharynx/larynx, unlike what would have happened with a reusable Macintosh blade with a bulb. The fact that this hazard is a possibility with fiberoptics affects many practitioners in acute hospital settings, and is one worth bearing in mind. It is not routine practice to check the disposable blade after 'single use' at

intubation. Should this be part of routine equipment checking?

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# The difference between peripheral venous pressure and central venous pressure (CVP) decreases with increasing CVP

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## EDITOR:

While a universally accepted measure of volume status remains elusive, measurement of central venous pressure (CVP) remains widely utilized. The inherent requirement for the insertion and maintenance of a catheter within the thorax however garners a wide range of potential morbidity and occasional mortality. Recent reports of correlation between CVP and peripheral

venous pressure (PVP) have prompted interest in PVP substitution for CVP. To date, correlation has been reported in the operating theatre and critical care settings for both adult [1–5] and paediatric [6] populations, without consensus as to whether reliance on PVP alone can be endorsed.

Investigators of isolated vascular beds have described a 'waterfall effect' to explain blood flow through collapsible tubing deformed by external pressures. Inherent in this concept is the summative effect of distending intraluminal, and compressive extraluminal pressures on vessel cross-section, and thereby resistance. We hypothesized the existence of vascular waterfall phenomena in the peripheral

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