A RARE CAUSE OF ENDOTRACHEAL TUBE OBSTRUCTION: A BROKEN STYLET GOING UNNOTICED

- A Case Report -

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Introduction

In anesthesia practice, stylet is used as an aid in difficult tracheal (ET) intubation. Disposable plastic covered or plastic bougies are recommended but in developing countries, the metal stylets are still in use. Shearing of part of stylet has been reported in past but all incidents were detected immediately. We report a case of tracheal tube blockade due to a broken stylet tip which initially went unnoticed.

Case Report

A 50 year old, female presented to emergency ward with history of headache since 4 days and loss of consciousness since 1 day. On examination, she was comatose with Glasgow coma scale of 7. She had stable vitals. In view of poor neurological status, attending physician decided to perform emergency endotracheal intubation under midazolam sedation. Initial attempt was unsuccessful. A second attempt with aid of a metal copper stylet was made and intubation was successful with some
difficulty. Computerized tomographic scan of head showed a frontal hematoma with subarachnoid hemorrhage. A diagnosis of subarachnoid hemorrhage (Hunt and Hess grade IV) was made and the patient was shifted to neurosurgical ICU.

In ICU, the attending anesthesiologist noticed decreased air entry at bases and difficulty in passing suction catheter via ET tube along with increased airway pressure up to 30 mmHg. Suspecting ET blockade, it was decided to change tube. On removing the ET tube, a metallic object protruding from the distal end of ET tube was noticed (Figure 1). Direct laryngoscopy, revealed oozing of blood in the periepiglottic area. After gentle suctioning, a new ET tube 7.5 mm ID was inserted. Airway pressure was noted to be 15 mmHg. The metallic piece was found to be the broken distal end of the intubating stylet. Possibly while performing intubation, the metallic stylet tip had snapped off. This went unnoticed initially, later causing obstruction of the tube.

This case highlights a hazardous complication due to equipment malfunction. Shearing off of tip can occur in both metallic and plastic covered stylets. Regular equipment check can avoid this problem. We suggest caution while using stylet for intubation.

Fig. 1
Broken tip of intubating metallic stylet protruding from the distal end of the endotracheal tube
References
