

Lost Airway in Airway

Tejesh C Anandaswamy^{1*}, Sahana Patil¹, Prathima P Thammanna¹

¹MS Ramaiah Medical College

Dear editor,

Anaesthesia equipment failure or malfunction can lead to patient morbidity and mortality. A broken airway exchange catheter during airway management is a potentially lethal complication that can lead to airway obstruction, acute hypoxemia, and airway trauma from the broken end.

A 63-year-old female, known case of gigivobuccal carcinoma, operated for wide excision supraomohyoid neck dissection and radiotherapy was scheduled for extraction of multiple caries teeth and release of oral fibrosis (sequel of previous surgery and radiation). An uneventful awake flexible bronchoscopy (Ambu@aScope™) performed for nasal intubation, as mouth opening was restricted to 1cm. General anaesthesia was administered to complete the scheduled surgery for release of oral fibrosis and multiple tooth extraction. Even after the release of fibrous bands in the oral cavity there was no appreciable improvement in mouth opening (approximately 1.5cm to 2cm) at the end of the surgical procedure. Hence, after adequate reversal of the neuromuscular blockade and when the patient was fully awake, the nasal endotracheal tube was removed over an airway exchange catheter. As the patient was maintaining the airway well and oxygen saturation was 96%-98% for about 15 minutes post extubation, the airway exchange catheter was removed. On removal of

the airway exchange catheter, it was noted that it was completely broken at about 20cm marking distally (Figure 1). The Ambu® aScope™ was passed through the nasal cavity and the tip of the broken airway exchange catheter could be visualized in the nasopharynx. The broken distal tip of the airway exchange catheter was gently retrieved by using a Magill's forceps under direct laryngoscopy using a Macintosh blade number 3 which could be inserted partially. Patient had an uneventful postoperative recovery.

Wu H-L et al., have reported an event of broken exchange catheter during replacement of a double lumen tube with a single lumen tube after thoracic surgery and have opined that the placement of the exchange catheter into the tracheal lumen of the double lumen tube as the contributing factor for breakage of the catheter.¹ Lo H-Y et al., have also reported breakage of the distal end of the airway exchange catheter in a patient in the intensive care unit during endotracheal tube replacement, which was detected on a chest X-ray.²

Airway exchange catheter is a single use disposable device. The device that we used had already been used multiple times. This mishap is a lesson to strictly avoid reuse of disposable devices. In addition, it is ideal to perform a careful inspection of the entire length of the device before its use to note for any pre-existing fractures or fragility of the device. Safety and cost-effectiveness of reuse of medical devices manufactured for single use needs to be addressed. The responsibility for patient safety and legal liability for reuse of disposable medical device will solely rest on the practitioner who reuses the device. The attending anaesthesiologist is ultimately responsible for any adverse outcome following reuse of any anaesthesia device intended for single use.

*Correspondence: Tejesh C Anandaswamy

E mail: drtejeshca@yahoo.com



<https://orcid.org/0000-0002-0553-5405>

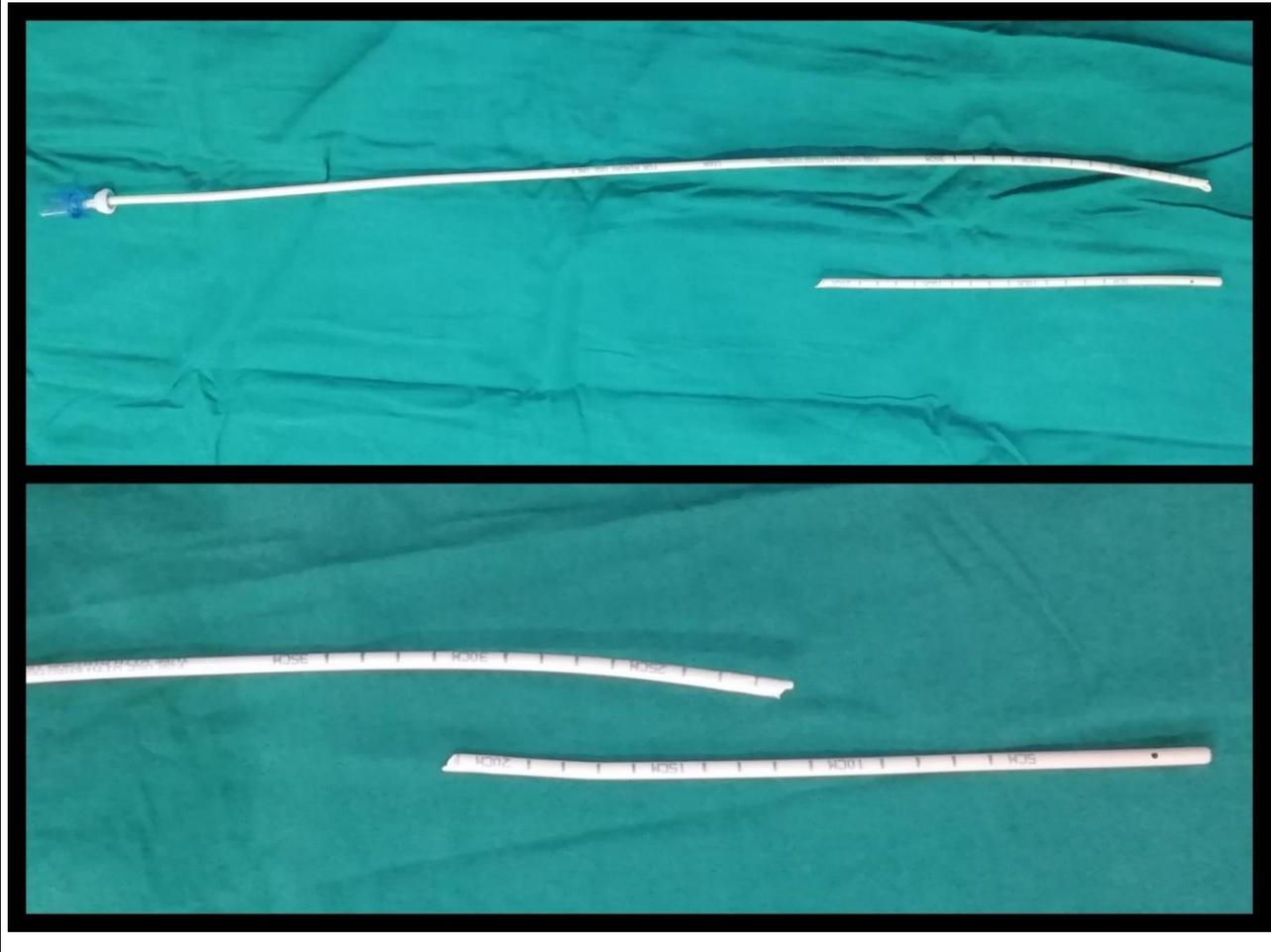
Received: 29/05/2021

Accepted: 01/05/2022

DOI: <http://doi.org/10.4038/slja.v30i1.8856>



Figure 1: Broken airway exchange catheter



References

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