

Awake tracheal intubation with C-MAC® video laryngoscope in a patient with corrosive injury-induced pharyngeal stricture

Dear Editor,

Corrosive ingestion can lead to high morbidity and mortality depending on the amount and pH of the solution. After resolution of the acute phase, progressive cicatrization ensues resulting in benign strictures of the upper gastrointestinal tract along with fibrosis and scarring of the upper airway.^[1] Extensive pharyngeal scarring can result in a difficult airway which may not be apparent on routine examination. An awake fiberoptic-guided intubation is the ideal method for securing the airway in such patients. However, in the event of nonavailability of a fiberoptic scope, securing the airway becomes challenging. We describe a new method of airway topicalization using a C-MAC® video laryngoscope ((Karl Storz GmbH and Co. KG, Tuttlingen, Germany).

A 22-year-old female weighing 36 kg with history of corrosive ingestion presented with a complaint of progressive dysphagia. Fiberoptic laryngoscopic examination revealed extensive scarring at the level of hypopharynx. She was scheduled for the laser release of the hypopharyngeal stenosis under general anesthesia. Our initial plan was to secure the airway awake using a fiberoptic scope. In the operating room, the base of tongue and posterior pharyngeal wall was topicalized with 10% lignocaine spray. However, the fiberoptic scope was out of order and we decided to use a video laryngoscope to secure the airway. An awake video laryngoscopy was carried out with size 3 conventional C-MAC blade, which showed extensive adhesions between epiglottis, base of tongue, and lateral pharyngeal walls leaving a small 6 mm opening which could easily be mistaken for a glottis [Figure 1]. Through the stenotic opening, the glottic opening could be visualized. In an attempt to topicalize the glottis and trachea, we tried to pass an epidural catheter through the cicatrized opening in the hypopharynx but failed to negotiate it. We then used a 5.0 mm uncuffed endotracheal tube (ETT) as a conduit for the epidural catheter to spray the vocal cords and trachea with 5 ml of 2% lignocaine [Figure 2]. Following this, a size 4 cuffed laser ETT, LaserTubus™ (Rusch®) was passed through the opening in the cicatrix, into the patient's

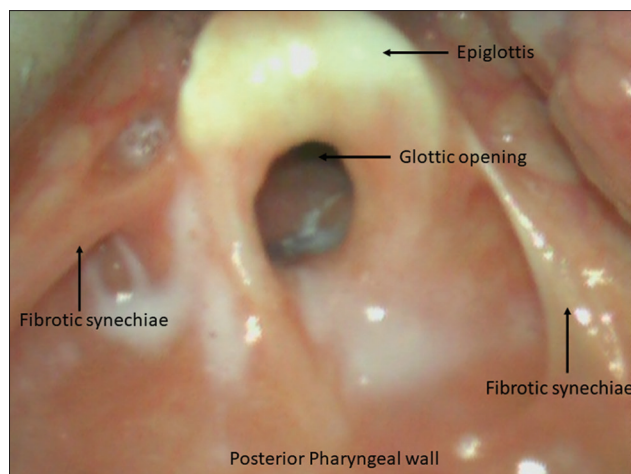


Figure 1: Extensive adhesions between epiglottis, base of tongue, and lateral pharyngeal walls

trachea. After confirmation of tube position with bilateral air entry and capnography, general anesthesia was administered.

Patients with prior history of ingestion of corrosive substances often present with a difficult airway warranting fiberoptic-guided intubation. In the absence of fiberoptic scope, we planned a video laryngoscopy-assisted awake intubation with a modified technique of airway topicalization in view of the pharyngeal stricture. A similar technique for glottic topicalization using a 8 FG suction catheter passed through the preloaded ETT on the Pentax AWS® has also been reported.^[2] The MADgic® atomizer is another device which has been used successfully to deliver atomized local anaesthetic for topicalization of the laryngotracheal region.^[3] In the absence of a fiberoptic scope, C-MAC® videolaryngoscope and the above-mentioned topicalization method can be safely used as an alternative option for awake tracheal intubation.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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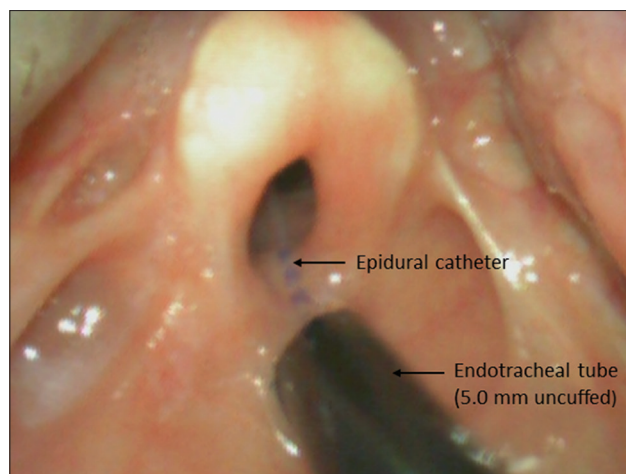



Figure 2: A 5.0 mm uncuffed endotracheal tube as a conduit for epidural catheter

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Quick Response Code:	Website: https://journals.lww.com/joacp
	DOI: 10.4103/joacp.joacp_290_21

How to cite this article: Yokasekar V, Chowdhury AR, Ramachandran R, Rewari V. Awake tracheal intubation with C-MAC® video laryngoscope in a patient with corrosive injury-induced pharyngeal stricture. *J Anaesthesiol Clin Pharmacol* 2023;39:319-20.

Submitted: 08-Jun-2021

Revised: 24-Jun-2021

Accepted: 30-Jun-2021

Published: 16-Mar-2022

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