

An Experience: An Oropharyngeal Airway with an Unique Feature

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Dear Editor,

Modern surgery practice necessitates safe and efficient anaesthesia requiring securing airway at the start of anaesthetic plan [1]. The primary goal of anaesthesiologist is providing oxygenation and ventilation [2]. Early evaluation of difficult airway is a critical step to re-establish ventilation and oxygenation.

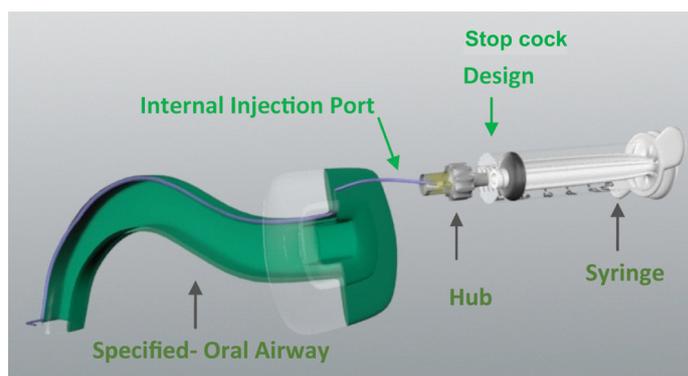
When one assesses difficulty with intubation or ventilation, one of the main approaches is associated with awake intubation [3]. Awake intubation is an essential part of anaesthesia in any patient with difficult airway, but it is associated with some complications such as gag, coughing or laryngospasm. In other words, good topical anaesthesia for airway instrumentation is needed [4]. Severe mortalities due to difficult intubation are common [5].

There are various plans for awake intubation; best of them is awake fiber optic intubation. These methods need topical anaesthesia for providing anaesthetist and patient's comfort, cooperation, maintenance of airway by spontaneously breathing [6]. Topical local anaesthesia application by nebulizing technique is one method to anaesthetize airway [7]. Topicalization is a simple method to spread LA to upper airway [8]. In spite of any advances, topicalization of airway is problematic and time-consuming [9], due to lack of a suitable device. In our institute, we had to face certain problems concerning difficult airway and awake intubation. Topicalization is one of our concerns due to prevention of any adverse reactions including gag or laryngospasm during awake intubation.

Thus, we prepared an airway with internal injection port (i.e., soft plastic) that allows spray of Local Anaesthetic (LA) into the upper airway. Its internal diameter is 2 mm ending with a stop cock design for injection to the right, left and inferior sides of glottis. In the outer portion, we designed a hub for syringe attachment, providing easy and rapid topicalization [Table/Fig-1].

We had good experience in terms of patient and operator satisfaction, while using the device in our institute. Till now, we had used it in more than eight patients with difficult airway, during the last two years.

As we need devices with less or minimal invasive methods in our practice, which are both safe and cost-effective, this device could be an ideal therapeutic approach in patients with difficult airway, particularly for inexperienced anaesthesiologists.



[Table/Fig-1]: Oropharyngeal airway with internal injection port in airway main body.

This invention is registered with the number 139450140003014069 in the Intellectual Property Center of the Islamic Republic of Iran.

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