

Awake video laryngoscopy as a rescue airway maneuver after a failed awake flexible bronchoscope-guided intubation: A case report

Dear Editor,

Airway management in patients with large thyroid mass can be extremely challenging due to tracheal deviation, tracheal compression, and tracheomalacia.^[1] History of any breathing and swallowing difficulty should be asked and the feasibility of emergency front-of-neck access should be assessed. Radiological images of the neck should be screened for tracheal deviation and the narrowest diameter of the

trachea should be noted to decide the appropriate size of the endotracheal tube.

A 58-year-old, 109 kg, male with huge thyroid swelling for 7 years was posted for total thyroidectomy. He had no difficulty in swallowing but had mild difficulty in breathing on lying down compelling him to take an extra pillow while sleeping. Neck swelling was measured around 25 cm × 15 cm [Figure 1]. Trachea was shifted to the right. The lower thyroid border was not palpable but there was no intrathoracic compression. Hopkin's fibreoptic laryngoscopy performed during outpatient assessment by the primary surgical team revealed that the vocal cords could not be visualized, only the tip of the epiglottis was visualized, and it was compressed to the right side. Computed tomography (CT) scan images revealed a thyroid mass measuring 15 cm × 10 cm × 11 cm involving the left lobe and isthmus with right-side displacement and



Figure 1: Photographs showing an anterior and lateral view of the neck swelling

compression of the trachea with a narrowest diameter of 7 mm [Figure 2]. The larynx was also pushed to the right side. Flexible bronchoscope-guided (FB) awake tracheal intubation (ATI) was the initial airway management plan.

The patient was premedicated with glycopyrrolate and nebulized with 4 ml of 4% lignocaine 20 min before the procedure. Nasal airway was prepared by packing with 4% lignocaine and oxymetazoline-soaked nasal pledgets. 15% lignocaine spray (5 such) was applied over the posterior pharyngeal wall and base of the tongue. FB was inserted through the nostril. But vocal cords could not be visualized even after repeated attempts and maneuver-like protruding tongue, vocalizing “EEE.” Compressed soft tissue around the larynx obscured the laryngeal view and made airway passage so narrow that the FB could not be passed. Video laryngoscopy was then used as a rescue measure. The compressed soft tissue around the larynx could be lifted anteriorly by the video laryngoscope leading to the opening of the airway passage and visualization of vocal cords. Successful ATI was performed using a flexometallic tube with a 5.5 mm internal diameter. The intraoperative course was uneventful. At the end of the surgery, the leak test was positive, and the surgeon confirmed the absence of tracheomalacia, based on his tactile feeling. The patient’s trachea was extubated over an airway exchanger catheter that was eventually removed after 15 min in post-anesthesia care unit.

FB is the gold standard instrument for ATI. But recently video laryngoscope is being used increasingly for ATI. Newer video laryngoscopes had a camera near the tip of the laryngoscope with a slightly upward angle leading to a better laryngeal view and a higher rate of successful intubation in difficult airways.^[2,3] Many researchers advocate video laryngoscope as the first line of airway management instrument in an anesthetized patient. Some researchers also advocate video laryngoscope as the primary technique for ATI.^[4,5]



Figure 2: CT scan image of neck swelling with compressed and right-sided deviated trachea

In conclusion, video laryngoscope is a very useful tool for ATI if FB-guided intubation fails.

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.

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Conflicts of interest

There are no conflicts of interest.

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