Letters to Editor

Difficult airway in ICU: Intubating from the left using videolaryngoscope

Dear Editor,

Difficult airway in a critically ill patient with multiorgan dysfunction is a high-risk procedure due to poor oxygen reserve, risk of worsening of shock with anesthetic drugs, and high possibility of cardiac arrest.^[1] A disoriented patient in shock is not amenable to awake intubation and surgical airway access is of limited help in presence of thrombocytopenia. We present a case of difficult airway in an obese 27-year-old male with multiorgan dysfunction with a hematoma on the right side of the neck resulting from right internal jugular venous cannulation.

His body mass index was 40 kg/m² and his acute physiology and chronic health evaluation score (APACHE) II was 30. On receiving from triage, patient was restless, hypotensive, tachypnoeic and tachycardic. Initially managed with fluids, vasopressors and noninvasive ventilation (NIV).

An ill-defined hematoma was present at the insertion site of CVC and backflow was absent. For inotrope administration, using ultrasound,

a new CVC was placed in the right femoral vein. Invasive blood pressure monitoring was established for hemodynamic monitoring. Because of worsening respiratory distress and severe metabolic acidosis, invasive mechanical ventilation was planned.

In anticipation of the difficult airway (BMI: 40 kg/m², mallampati grade IV, and neck circumference 17 inches), the difficult airway cart was kept ready. After preoxygenation using NIV, the patient was given titrated doses of fentanyl midazolam and propofol intravenously. A nonchanneled videolaryngoscope with Macintosh blade size 5 was used for the first attempt and Cormack Lehane grade 3A was visualized along with a large bulge overhanging the right side of epiglottis due to the external hematoma [Figure 1]. Attempt to insert bougie from the right side failed and because of desaturation, immediate bag and mask ventilation was resumed.

In the second attempt using a video-laryngoscope with the right hand by a more experienced anesthesiologist, an attempt to insert bougie from the left side was successful, as this side was normal. The cuffed endotracheal tube of internal diameter of 8.0 was successfully inserted over the bougie and successful ventilation could be resumed. Cricoid pressure was used during both attempts.

In a difficult airway scenario, awake videolaryngoscopy is a viable option over awake fiber optic due to lesser time taken for tube placement.^[2] The use of videolaryngoscope is now recommended very early (first-line or after a first-attempt failure using direct laryngoscopy) in ICU airway management algorithms.^[3]

For standard blade style videolaryngoscopes, the blade is inserted in the midline without sweeping the tongue laterally and the endotracheal tube is introduced from the right angle of the mouth.^[4] While using videolaryngoscope, there is equal space on both sides for tube insertion. In our patient, when an attempt from the right side failed, inserting endotracheal tube from the left angle of the mouth with the left hand of the laryngoscopist provided a simple lifesaving solution.



Figure 1: View of glottis using videolaryngoscope

We could successfully secure the airway in a critically ill patient with multiorgan dysfunction with preoxygenation with NIV, appropriate hemodynamic monitoring, and vasopressor use and inserting bougie from the left side using videolaryngoscope.

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Conflicts of interest

There are no conflicts of interest.

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