

Retrograde Intubation Using Epidural Catheter- A Safe and Cost Effective Technique- A Case Report

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Abstract: Patients, having failed intubation due to restricted mouth opening (less then 3 fingers , mallampati grade 2) and limited movement of temperomandible joint presented as a difficult situation to secure airway. Fiber optic is a gold standard technique for this situation but this is not available in our hospital.The Retrogrades intubation technique via epidural catheter can be a important and safe method for such cases.

Keywords: Retrograde intubation, epidural catheter .

I. Introduction:

Retrograde intubation one of the easy and safe method for patients having restricted mouth opening . This technique first described in Nigeria for intubation of patients with cancrum oris⁽¹⁾.

II. Case Report:

A 40 years old man weighing 64 kg presented with complain of backache since 2 years . He admitted to neurosurgery department . case was posted in routine OT for L3-L4 dissectomy.Patient was chronic tobacco chewer since 15 years.pateints mouth opening was only 2 cm. Airway examination was normal. Patient undergone failed indotracheal intubation so that; this case posted again to next day routine OT.

We explained to patient and his relatives about the procedure and took the informed written consent for Retrograde intubation and tracheostomy as per requirement. We did all required preparations.Cricothyroid membrane was punctured with BT set needle with the angle slightly cephalic direction and 2 ml of 2% lidocain was instilled into the trachea and epidural catheter was inserted. Catheter was retrieved through the oral cavity using magills forceps⁽²⁾.We threaded endotracheal tube ID 7.5 mm over the catheter and inserted 1 cm beyond vocal cords. Bilateral air entry checked and position of tube was confirmed with Et CO2.after confirmation epidural catheter was removed. Anaesthetic induction was done with intravenous thiopenthal 300 mg and vecuranium 5 mg and maintained with oxygen, nitrous oxide, isoflurane and injection of vecuranium. After completion of surgery , patient was extubated when patient started obeying commands and protective reflex were present. Recovery was uneventful.



III. Discussion:

Intubation in the patients having restricted mouth opening , we have three options. 1. Blind nasal intubation 2. Retrograde intubation 3. Fiber optic laryngoscope.failure rate of blind nasal intubtion is high. Fiber optic laryngoscope requires high maintenance cost and expertisation. Retrograde intubation is well known

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alternative method for securing the airway in difficult algorithm. due to unavailability of retrograde intubation set , we used epidural catheter with BT set needle which is available everywhere. This technique can be utilized as a safe and cost effective alternative in centers which are unequipped with fiber optic laryngoscope.

References:

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