

An Easy Approach To The Difficult Re-intubation -- A Novel Technique Combining Awake Fiberoptic Intubation And A Staged Extubation Guidewire.

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Background:

The use of airway exchange catheters (AEC) for "at risk" extubations are recommended in the DAS Extubation Guidelines¹.

Staged extubation sets (SES) using a guidewire are increasingly popular. They allow a conduit for the passage of an endotracheal tube into a potentially difficult airway. However, problems with misplacement of airway exchange devices and subsequently the endotracheal tube (ETT) can mean that airway control is threatened and serious complications can arise.²

To avoid this complication we describe a *novel* technique utilising the advantages of both an awake fiberoptic intubation and SES.

Case:

A 62 year old ASA 2 lady underwent hemiglossectomy, neck dissection and free flap reconstruction. At the end of the procedure an SES guidewire was sited via the nasal tube. After 30 minutes in recovery the patient was had 500mls of blood in the drains. The decision was made to return to theatre.

Oxygen was given via a hudson mask and end tidal CO₂ (ETCO₂) was monitored. Remifentanyl and propofol sedation was started at 1.5ng/ml and 0.8mcg/ml respectively. An Olympus LF-GP fibrescope was used with a 18G Portex epidural catheter threaded via the suction port. This was inserted nasally, the glottis was visualized and the guidewire location through the vocal cords confirmed. The glottis was topically anaesthetized using 4% lignocaine via the epidural catheter and the fibrescope withdrawn.

A size 6.0 reinforced ETT was mounted on the fibrescope and the epidural catheter removed. The SES guidewire was then fed into the distal suction channel until it exited proximally.

The fibrescope was fed nasally along the guidewire under direct vision. Once at the level of the carina the ETT was railroaded and its position in the trachea confirmed. The fibrescope and guidewire were then removed. The ETT was connected to the anaesthetic circuit and anaesthesia induced. The surgery was completed uneventfully.

Discussion:

Our novel technique has a number of advantages:

- 1) Direct visualization of the SES guidewire
- 2) *Familiarity*: The majority of anaesthetists are skilled in awake fiberoptic techniques and the process is essentially the same

REFERENCES:

- 1 Difficult Airway Society Extubation Guidelines Group. Popat M, Mitchell V, Dravid R, Patel A et al Anaesthesia. 2012 Mar;67(3):318-40.
- 2 Fetterman D, Dubovoy A, Reay M. Anesthesiology. 2006 May;104(5):1111-2.