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# Awake Intubation

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## OVERVIEW

- can be performed using direct or video laryngoscopy or using a fiberoptic scope, and various methods of topicalisation/ local anaesthesia are described
- surgical airways can also be performed awake, using local anaesthesia

## INDICATIONS

In general, awake intubation should be preferred if:

- airway does not need to be immediately secured (i.e. sufficient time for preparation)
- significant risk of a difficult airway
- low risk of vomiting
- compliant patient
- endotracheal intubation via the nasal or oral route is feasible

## AWAKE INTUBATION WITH A DIRECT OR VIDEO LARYNGOSCOPE

Based on the approach described by Scott Weingart and Reuben Strayer:

- Glycopyrolate 0.2 mg or Atropine .01 mg/kg – glycopyrolate is preferred, ideally given 15 min prior to next step
- Ondansetron 4mg IV (may help decrease gag reflex)
- Suction then pad dry mouth with gauze
- Nebulized Lignocaine at 5 L/min, ideally 4mL of 4% lidocaine but can also use 8mL of 2% lidocaine
- Atomized Lignocaine sprayed to oropharynx especially if unable to give full dose of nebulized lidocaine (if using a De Wilbiss atomiser point nozzle downwards and activate during inhalation for 8 breaths to anaesthetise the cords and trachea)
- 'Viscous lignocaine lollipop': administer 2% viscous lignocaine on a tongue depressor and instruct patient to gargle
- Preoxygenate
- Position
- Gentle restraint if needed
- Switch to nasal cannula
- Lightly sedate with Ketamine 20 mg aliquots every 2 minutes (alternate agents may be used, such as dexmedetomidine or remifentanyl)

- Intubate awake or place bougie, then paralyze, then pass tube
- if patient coughs on passing bougie: spray more lignocaine using atomiser and/or push ketamine 50mg IV to sedate patient (advance ETT over bougie approx 15 seconds after ketamine administered)

## **AWAKE FIBEROPTIC INTUBATION**

Awake fiberoptic intubation – topicalise with LA as you go, cannulate trachea, assess whether trachea normal with bronchoscope, intubate passed defect, may need remifentanil or ketamine for analgesia, may be limited by blood and debris

- if able use nasal approach
- topicalise with co-phenylcaine forte (5 sprays to each nostril while inspiring)
- 5 sprays of 10% lignocaine to oropharynx (4% lignocaine may be all that is available)
- consider trans-tracheal injection via cannula to crico-thyroid membrane
- insert successive nasopharyngeal airways up to #7.0
- insert fiberoptic scope into naso-pharynx
- cannulate trachea
- advance #7.0 ETT over scope

## **References and links**

### *Journal articles*

- EMCrit Podcast 145 — [Awake Intubation from SMACC](#) (2014)
  - Kaviani, N., & Ranjbaran, F. Evaluation of the efficacy of oral ondansetron on gag reflex in soft palate and palatine tonsil areas. *Journal of Isfahan Dental School*, 2011 6(6), 691–697
  - Kramer A, Müller D, Pfortner R, Mohr C, Groeben H. Fibreoptic vs videolaryngoscopic (C-MAC®) D-BLADE) nasal awake intubation under local anaesthesia. *Anaesthesia*. 2015 Apr;70(4):400-6. doi: 10.1111/anae.13016. PubMed PMID: [25764403](#).
  - Simmons ST, Schleich AR. Airway regional anesthesia for awake fiberoptic intubation. *Reg Anesth Pain Med*. 2002 Mar-Apr;27(2):180-92. Review. PubMed PMID: [11915066](#). [\[Fulltext\]](#)
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