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Technique For Awake GlideScope Intubation Under Topical Anesthesia

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Technique For Awake GlideScope Intubation Under Topical Anesthesia

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My opinion

For predicted difficult airway intubation, awake fiberoptic intubation under topical anesthesia has been there for quite a while especially when prediction is difficult-to-impossible to safely intubate trachea under any level of sedation with or without loss of spontaneous breathing. Except for awake fiberoptic intubation under topical anesthesia, fiberoptic intubation has largely gotten replaced with videolaryngoscopy like GlideScope in current practice of anesthesia when dealing with predicted difficult airway intubation [1-2]. However, awake GlideScope intubation under topical anesthesia is rarely used if ever but GlideScope can come in handy considering that currently anesthesia providers are more frequently trained to use GlideScope and may feel uncomfortable using fiberoptic scope for awake airway intubation. Therefore, it may be better to train current anesthesia providers to use GlideScope for awake airway intubation rather than prematurely calling for otorhinolaryngologists for awake fiberoptic intubation or even tracheostomy under local anesthesia.

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Topical anesthesia technique for awake GlideScope may be same as topical anesthesia technique for awake fiberoptic intubation. The personal preference is following:

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In the preoperative area:

- Intravenous glycopyrrolate 0.2 mg
- 3ml 4% lidocaine (120mg) [3] for nebulization via simple oxygen mask
- 3ml 4% lidocaine (120mg) for oral gargling

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In the operating/procedure room:

- · Standard anesthesia monitoring
- Low Fowler's position with patient's head inclined up at 15-30 degrees [4]
- Nasal cannula for oxygen supplementation with continuous end-tidal carbon dioxide monitoring [5]
- Intradermal local anesthesia of skin over cricothyroid membrane to allow transtracheal delivery of 3ml 2% lidocaine (60mg) [6] via 22G hypodermic needle

- connected to 5ml syringe to aspirate air as confirmation of intratracheal position of 22G hypodermic needle
- 5-10 minutes later, slow insertion of GlideScope blade followed by additional aerosol spraying of oropharynx and laryngopharynx with benzocaine 20% [7]
- Well-lubricated endotracheal tube over rigid stylet railroaded into spontaneously breathing awake patient's trachea
- Connection to anesthesia circuit and ventilator so as to reconfirm intratracheal placement of endotracheal tube with continuous end-tidal carbon dioxide monitoring before administration of intravenous plus inhalational anesthesia with or without muscle relaxants thereafter

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Summarily, anesthesia providers trained on GlideScope day in, day out should be trained in awake GlideScope intubation because learning trajectory and learning curve of awake fiberoptic intubation may have become steeper in current times considering that anesthesia providers' exposure to fiberoptic intubations may have bottomed out since easier use of GlideScope among predicted difficult airway intubation scenarios may have taken the hold of anesthesiology as a specialty. Â Â

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