

Airway Topicalization the Recipe for a Successful Awake Intubation

Awake intubation is all about cooperation and cooperation is all about making the procedure tolerable through appropriate topicalization. I have to admit I learned from the masters Ian Morris (2nd edition author of Rosen's Airway Chapter, right in pic), dual trained Anaesthesia/Emerg (and my neighbour) and my academic partner in crime and co-developer of AIME Adam Law (left in pic). I also have to credit our failed attempt to bring an airway device market and our topicalizing each other to gain proof of effectiveness. I've tried to simplify the approach from what is done in the OR and believe we have the correct mix. To take short-cuts beyond this risks failure. One issue to get off the table up front is how cooperative do you need the patient to be to be successful. It won't work in the actively combative patient but view this in the same way you would a patient who doesn't tolerate oxygenation... aim for facilitated cooperation (aka give some vitamin K if needed) as you would as part of a DSI. But sedation or disassociation is not an excuse to perform poor topicalization. Video to follow.



I prefer to go through the mouth with a flexible intubating scope (device pet peeve: we aren't doing bronchoscopy and not using fiberoptics we are using a flexible scope to intubate). it is as easy to do as a nasal approach even without a guide is more comfortable and avoids the minor issue of having a nasal ETT. This method outlined before works well for awake video or direct laryngoscopy.

This is my modified approach to skin a rabbit/visit the carina:

Use an atomizer. We use the disposable EZ spray atomizer (Aocove Medical). You will need ~10ml of 4%. Hook this up to air or O2 at ~8 lpm

Use 2 applications of ~1 inch of 5% lidocaine ointment (not 2% gel) on a tongue depressor.

The key is to topicalize the gag sensitive region and the area that is most painful during laryngoscopy, the posterior tongue (and vallecula for DL/VL)

Warn the patient that they may feel a bit anxious when their 'voice box' is frozen (I've had this happen and it's an odd type of dyspnea).

1. Apply 1 inch of the 5% lidocaine ointment to a tongue depressor and push it distally to create a lidocaine lollipop. Trap anterior the tongue with a gauze and gently apply the lidocaine lollipop as posterior as possible so that it 'melts' down the posterior slope of the tongue. It may take 2-3 passes to apply this initial application.

2. Spray of the tongue, tonsillar regions, posterior pharynx generously.

3. Repeat step 1 with another dose of 5% ointment.

4. Warn the patient that the next bit of spray may make them feel a bit short of breath. The glottic dyspnea described above. Reassure them

5. Trap the tongue. Bend the nozzle tip down to 70-90° and attack the posterior tongue and glottis. Do this a couple of times.

6. Perform 3 glottic/tracheal sprays either through the mouth with nozzle tip bent to 90 during inspiration or apply through a patent nares again during inspiration through the nose. Remember the nose provides a secret path posteriorly to the glottic inlet.

7. Put the damn scope in and tube the patient.

DON'T UNDERESTIMATE THE IMPORTANCE OF REASSURING THE PATIENT AFTER EACH STEP.

NOTE re. Lidocaine toxicity: using absolute numbers for an average adult you are pretty close to the upper limit of local lidocaine. HOWEVER without drying agents there is a dilution effect from the patient's natural secretions that occurs and toxicity is very unlikely to occur.