



Advanced Airway Quick Guide

King Vision

- self-contained video laryngoscope with a **re-usable handle/screen** and X 2 disposable # 3 channeled blades
- any patient requiring intubation during an interhospital mission who has features suggestive of difficult direct laryngoscopy should have the King Vision video laryngoscope present and a plan for use elucidated

Notes

- requires at least 18 mm of mouth opening
- low battery indicated by flashing orange LED – there are 3 AAA batteries in handle with spares in the case
- if screen freezes - the handle and blade have become disconnected – re-insert snugly, turn off and on
- The blade can be inserted in the vallecula or used to lift a large epiglottis
- best view is far enough away that the glottis takes up ~50% of the screen

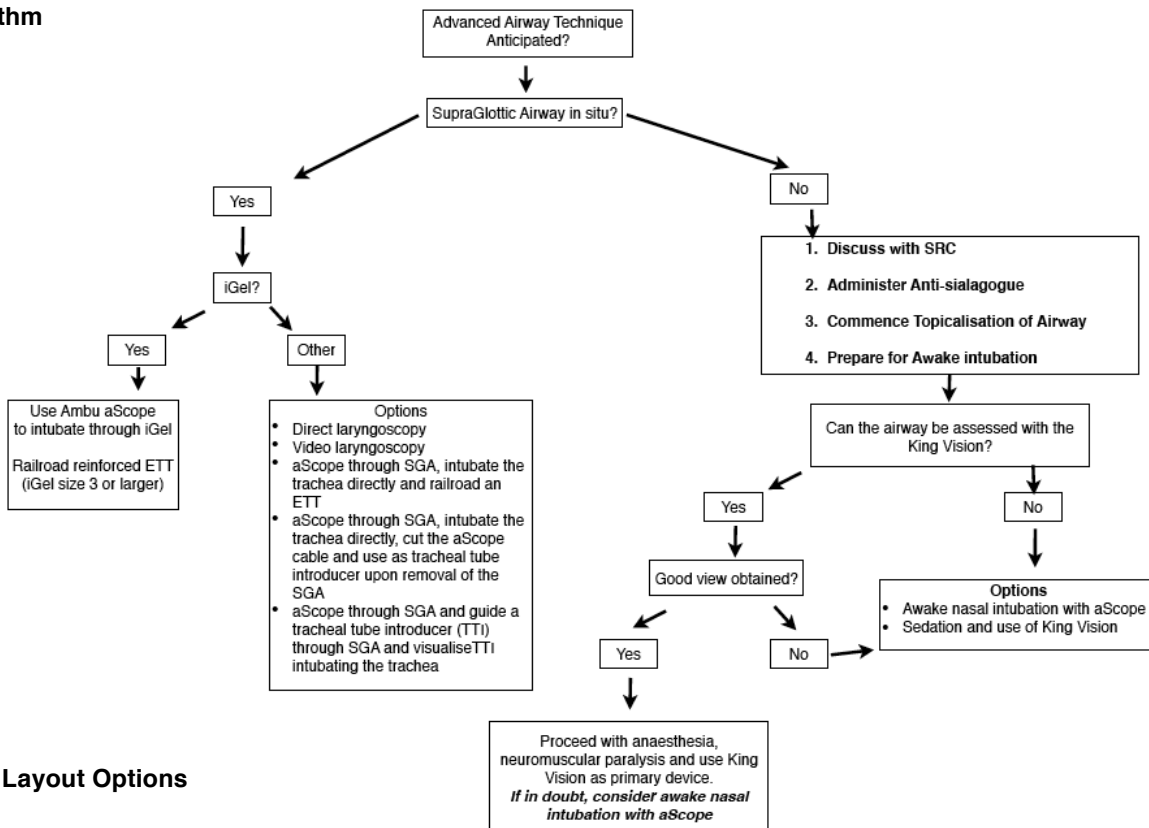
Ambu aScope 2

- **Re-usable screen** with AC adaptor in bag with X 2 disposable sterile scopes in the packet and ready to use.
- Scope has a luer channel for administering local anaesthesia or oxygen; it is not suitable for suctioning through.

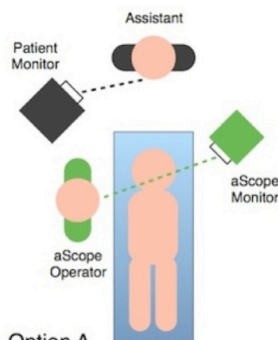
Notes

- when the Ambu aScope 2 is connected to the Ambu aScope Monitor, do not disconnect it within the first two minutes.
- aScope 2 can be switched on for a total of 8 hours from first connection after which it is rendered unusable.
- smallest tracheal tube that will fit over it is a 6.0 ID.
- ridges at base of device designed to hold tracheal tube over the scope
- Cleaning the scope is best done with gauze and requires firm pressure

Algorithm



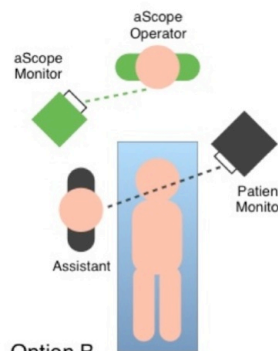
Room Layout Options



Option A

aScope operator stands to the right of the patient.

The assistant cannot see the aScope monitor which allows them to concentrate on the patient



Option B

aScope operator stands at the head of the patient.

The assistant cannot see the aScope monitor which allows them to concentrate on the patient



SGA in place

The insertion of a Supraglottic Airway Device (SAD) may occur after a failed intubation attempt. Usually, the patient will require a tracheal tube prior to transfer. There is time to perform a Flexible Optic Intubation (FOI).

Five top tips for FOI through a SAD

- Add 3 to the iGel size for the max ETT size (a Size 4 iGel will take a size 7 ETT).
- Preparation is key. Don't start until you have all equipment ready.
- If you encounter secretions, pull out and use a suction catheter to clear the way.
- Remember that external manipulation of the jaw and airway may help.

Contra-indication to RSI – “Awake” Techniques

Options include an 'awake' look with the KV under local anaesthesia, or awake flexible optical intubation.

The use of the Ambu aScope and King Vision should be as part of a planned strategy in which the alternative default options of RSI with direct laryngoscopy, supraglottic airway, and surgical airway have been considered and prepared for.

Pts with immediate need for airway management such as ventilatory failure are unsuitable for awake techniques

Awake flexible optic intubation

3 steps: 1. Pre-treatment 2. Topicalisation 3. Intubation

1. Pre-treatment

Anti-sialagogue - Secretions are the enemy of FOI so try and eliminate them as much as possible- Atropine 500micrograms IV

Sedation- the patient's condition may dictate appropriate use of sedation agents. Consider local anaesthetic only.

Benzodiazepine – Midazolam 1-2mg IV

Low doses of Ketamine or propofol

2. Topicalisation

The maximum safe dose of lignocaine for airway topicalisation is generally considered to be 4mg/kg

The options for topicalisation are

- nebulisation
- spray-as-you-go (SAYGO)
- combination of both.

Weight	Max safe dose (mg)	Co-phenylcaine 6 squirts (5% lignocaine=5mg per squirt)	Lignocaine available (mg)	2% Lignocaine (mls)
60	240	30	210	10.5
80	320	30	290	14.5
100	400	30	370	18.5
120	480	30	450	22.5

Nebulisation - In a compliant pt who can breath deeply, nebulised 2% lignocaine (up to 5-10mls) at 6-8l/min

SAYGO (spray-as-you-go)- can be achieved via 2 conduits: mucosal atomiser (MADgic) and luer channel of the aScope.

Technique

- 1) 3 squirts of co-phenylcaine per nostril.
- 2) 1-2 mls of 2% Lignocaine to tongue via MADgic.
- 3) 1-2 mls of 2% Lignocaine to posterior pharyngeal wall via mouth and the MADgic.
- 4) 1-2mls of 2% Lignocaine to posterior nostril. Place MADgic nozzle into each nostril and inject back of each nostril.

Top tip: Divide the 2% lignocaine into 1ml aliquots in individual labelled 2ml syringes. Only use what you need and you can keep track of the dose given. Test adequacy of topicalisation using Yankauer sucker

Oxygenation strategy

Consideration should always be given to the oxygenation strategy before, during and after airway management. During awake nasal flexible optic intubation (FOI), oxygen can be delivered by both a nasal prong and facemask.

The nasal prong can be applied to the contralateral nostril, and the facemask can be placed over the mouth.

Awake Video Laryngoscopy

Awake looks can be done in the usual intubating position, or in the upright patient using a 'tomahawk' grip. A good view during an awake look suggests it is likely to be safe to undertake RSI using the KV for laryngoscopy.

Awake Flexible Optical Intubation

Procedure usually performed with patient upright using nasal route unless contraindicated by coagulopathy etc

6.5 # Re-inforced tube can be inserted in nares to 12-15cm to provide a conduit through the nose or the scope can be inserted "naked". Protrusion of the tongue often converts a poor view of the glottic opening into a better view. If the patient is unable to protrude the tongue, a piece of gauze folded onto the tip of the tongue which is then clamped with Magill's forceps will allow the tongue to be pulled forward.

Team Management

Good team resource management is critical to the success of Flexible Optic Intubation (FOI). There is time to prepare and this must be done efficiently and effectively. There are many factors to consider including:

1. **Personnel** - careful positioning and briefing of assistants is essential.
2. **Equipment** - all equipment needs to be prepared and checked. Patient monitoring should be maintained.
3. **Patient** - careful positioning and gaining patient acceptance and trust are vital.



CHECKLIST FOR AWAKE INTUBATION

Equipment	CHECKED
King Vision handle (turns on) and blades X2	
Ambu aScope 2 screen with AC adaptor	
Ambu aScope 2 scope X2	
Gauze for cleaning scope	
6.5 # re-inforced tube	
Nebuliser mask for topicalisation	
Oxygen mask/Nasal Prongs	
MADgic mucosal atomizer	
Yankauer sucker and suction working	
Optional	
3 way tap for luer channel	
Oxygen tubing for luer channel	
Magill forceps with gauze for tongue traction	
Medications	
Atropine 500mcg IV	
Lignocaine 2% / Max Dose checked /decanted into syringes	
Co-phenylcaine with spray nozzle	
Sedation agents (if using pre-intubation)	
NM blocker eg Rocuronium 100mg	
Post intubation sedation eg propofol/ketamine	
Personnel	
Patient briefed	
Airway equipment assistant	
Assistant for head control	
Assistant for ELM/jaw thrust/tongue control	
Failed intubation backup plan	
Plan discussed with team	
SRC call made	Ph 0297096856
I-gel LMA sized	
Surgical Airway kit and anatomy examined and marked	