

Awake Videolaryngoscopy

Prof Cyprian Mendonca

Indications

- Anticipated difficult airway with mouth opening >2.5 cm
- Cervical spine disease
- Favourable airway pathology

Awake Videolaryngoscopy compared to FOI

- Technical skill-VL is easy
- Tracheal intubation under direct vision- real time confirmation
- Easy set up
- Shorter time
- Not able to negotiate round the corner

Original Article

A feasibility study of awake videolaryngoscope-assisted intubation in patients with periglottic tumour using the channelled King Vision[®] videolaryngoscope^{*}

L. Markova,¹ T. Stopar-Pintaric,^{2,3} T. Luzar,⁴ I. Benedik⁴ and I. Hodzovic⁵

Tumour location

Supraglottis	7	23/ 25 intubated
Glottis	13	2 failed -inadequate LA
Subglottis	5	5 patients 2 attempts, 1 patient 3 attempts



Figure 2 King Vision view of the periglottic tumour.

Awake tracheal intubation using Pentax airway scope in 30 patients: A Case series

Payal Kajekar, Cyprian Mendonca, Rati Danha, Carl Hillermann

Department of Anaesthesia, University Hospital Coventry and Warwickshire NHS Trust, Coventry, CV2 2DX, United Kingdom

25/ 30 were successful = 83 % success rate

24 in first attempt and one required 2 attempts

Reasons for failure

1. Excessive gagging x1
2. Trauma patient-c/co neck pain x 1
3. Grade 2 view, tube couldn't be advanced x2
4. Un co-operative, anxious patient x1

Table. Reports of Video Laryngoscopy for Awake Intubation

Year	Citation	Device(s)	Report Type	Cases, N	Patient Conditions
2004	Doyle ⁶	GlideScope (Verathon)	Letter	4 cases	Obesity, trismus
2009	Dimitriou et al ⁷	Airtraq (Prodol Meditec)	Case report series	4 cases	Ankylosing spondylitis, trismus-high Mallampati score, trismus
2012	Rosenstock et al ⁸	FIS vs McGrath MAC (Aircraft Medical)	RCT	93 patients	Anticipated difficult airways
2015	Drenguis and Carlson ⁹	GlideScope vs C-MAC (KARL STORZ Endoscopy)	RCT	26 views of the glottis	Normal airways, sitting "face to face"
2016	Mahran and Hassan ¹⁰	GlideScope vs FIS	RCT	54 patients	Nasal intubation, oropharyngeal cancer
2016	Nassar et al ¹¹	GlideScope vs Bonfils Retromolar (KARL STORZ Endoscopy)	RCT	60 patients	Morbid obesity
2016	Mendonca et al ¹²	Pentax Airway Scope	RCT	40 patients	Clinically evaluated risk for difficult intubation

Awake Videolaryngoscopy



x1



x1



x4



x1



Alhomary M. et al. Videolaryngoscopy vs. fiberoptic bronchoscopy for awake tracheal intubation: a systematic review and meta-analysis. *Anaesthesia* 2018;73: 1151-61

Awake Videolaryngoscopy

- Shorter intubation time
- Success rate and safety profile is comparable to FOS

Alhomary M. et al. Videolaryngoscopy vs. fiberoptic bronchoscopy for awake tracheal intubation: a systematic review and meta-analysis. *Anaesthesia* 2018;73: 1151-61

Practical approach of awake VL

- Equipment set up
- Technique of Airway anaesthesia
- Laryngoscopy and tube placement

Equipment set up and drugs

- Videolaryngoscope
- Tracheal tube
- Oxygen administration
- Sedation technique
- Glycopyrrolate
- Topical anaesthesia to the airway
- Back up plan- FOS

Monitoring, sedation and oxygen administration

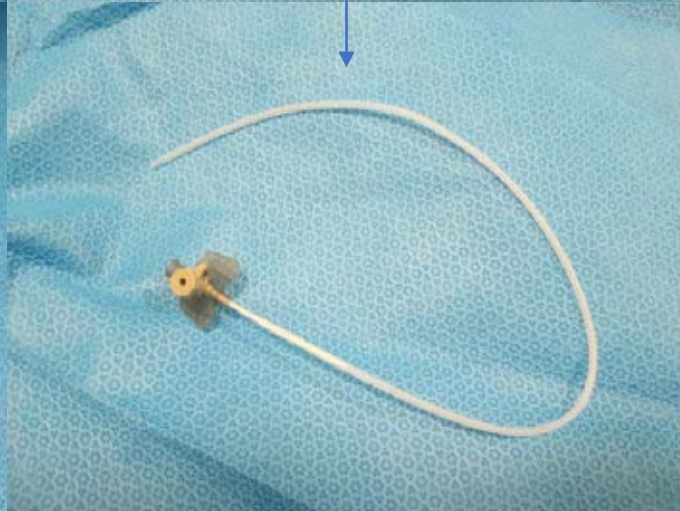




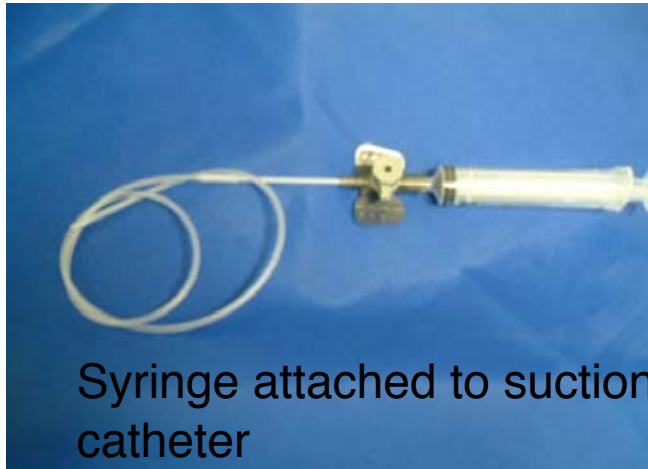
McKenzie Technique



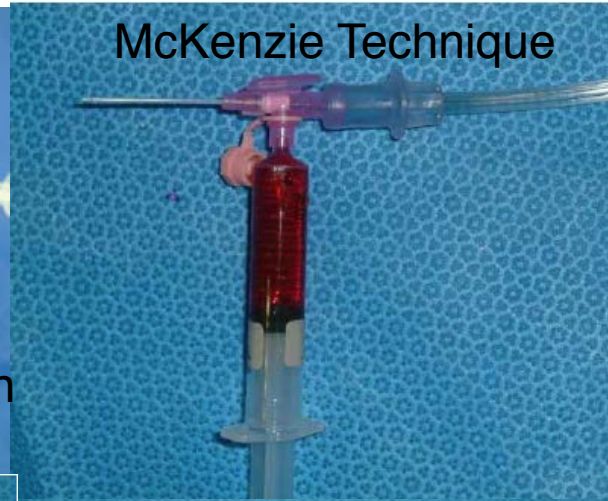
6 or 8 FG suction catheter
(paediatric suction catheter)



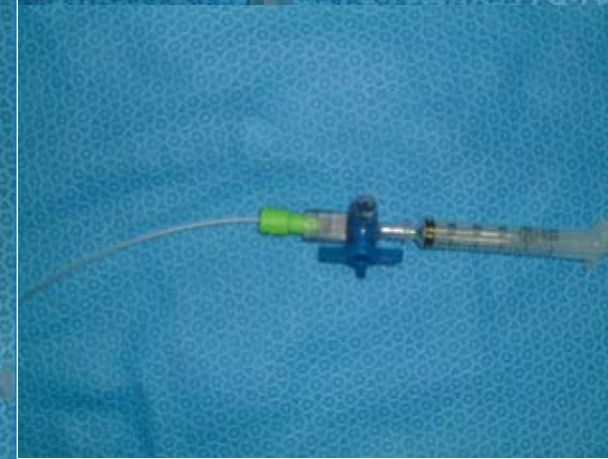
Proximal end is cut and
venflon inserted
Needle removed.
Now syringe can be attached

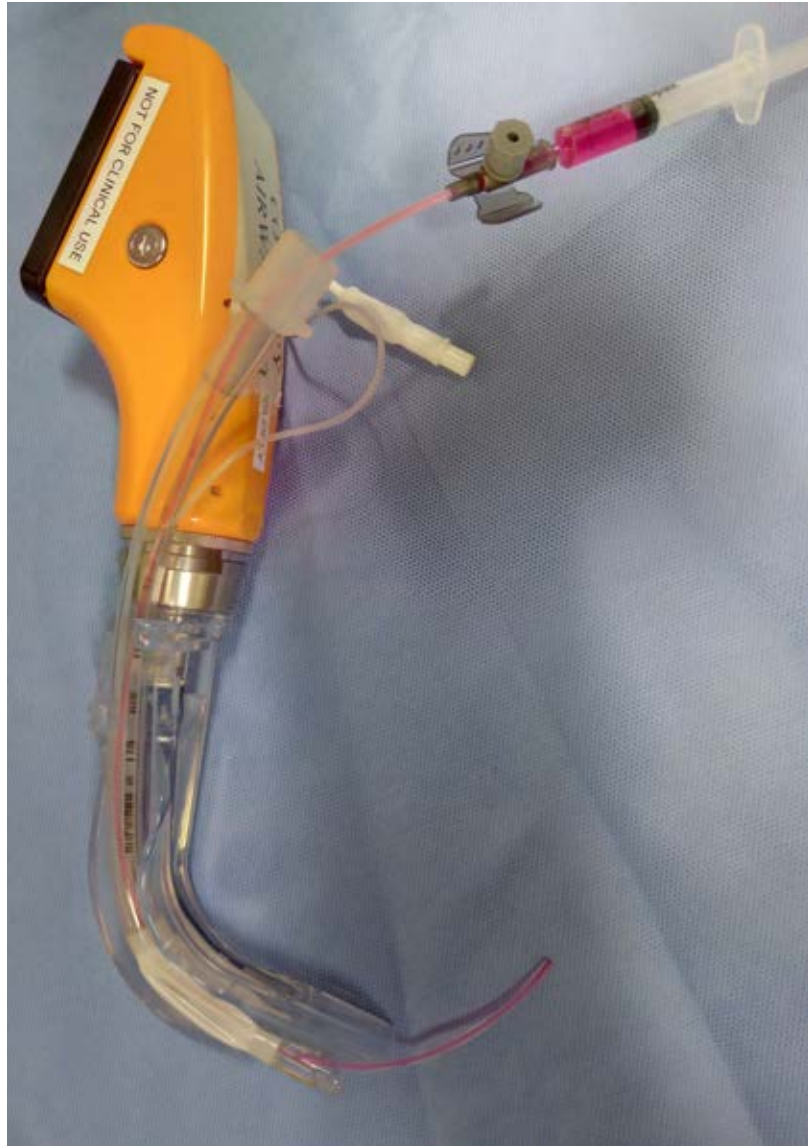


Syringe attached to suction catheter



McKenzie Technique





Suction catheter passed through the tube for topicalisation of LA to epiglottis and Trachea



MAD Device can be used for non-channelled VLs

4 ml of 4% lignocaine to oropharynx using McKenzie technique- directed to soft palate, posterior pharyngeal wall and base of tongue

4 ml of 4% lignocaine: 0.5 ml sprayed to oropharynx with each breath, synchronised with inspiration. Droplets of lignocaine inhaled and should settle around epiglottis and around vocal cords and partly in trachea.

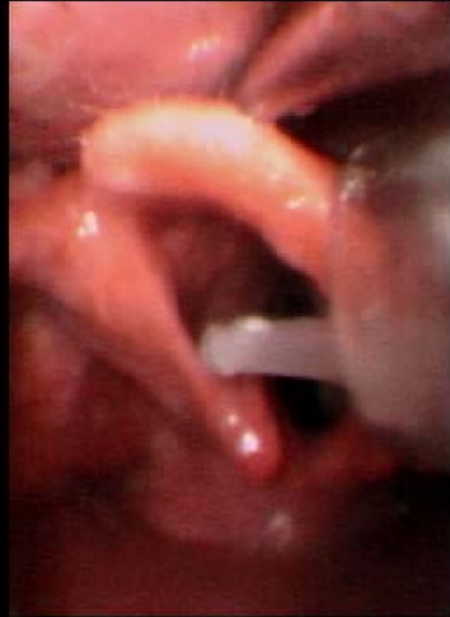
Now suction the oropharynx and ensure that patient can tolerate oropharyngeal suction

Now insert the video laryngoscope into the oral cavity and visualise epiglottis

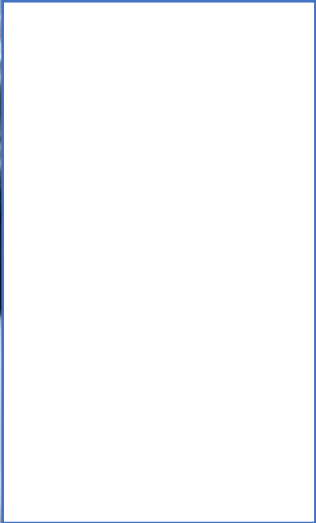
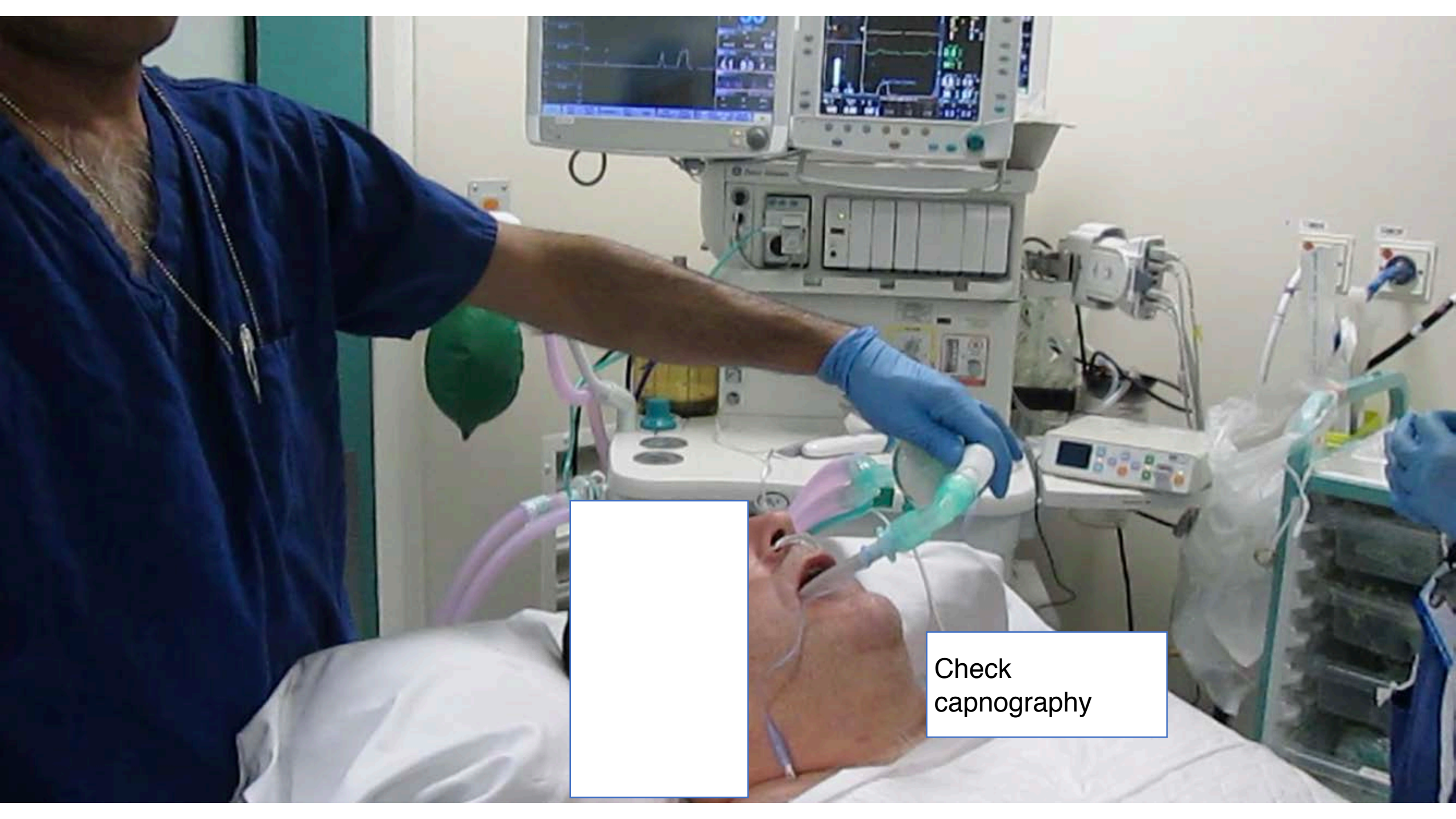




Suction catheter passed through the tube is used for delivering 4% lignocaine to epiglottis and glottis



Suction catheter advanced through the cords to trachea



Check
capnography

Thank you