

Video Laryngoscopes

Novelty, Mandatory or Morbidity

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Disclosure

- I receive no direct financial payments from any companies mentioned in this presentation
- Paid Contractor of Motorcycling Australia as the Chief Medical Officer of the international motorcycle events for which I also receive donation of equipment from
 - Glidescope
 - Airtraq
 - AGFA
 - Phillips Healthcare
 - Sonosite

Summary

- Different range of Video Laryngoscopes available
- Evidence behind their use
- Advantages, Disadvantages and Morbidity
- Pick a winner?

Video Laryngoscopes



- Novelty?
- Mandatory?



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Types

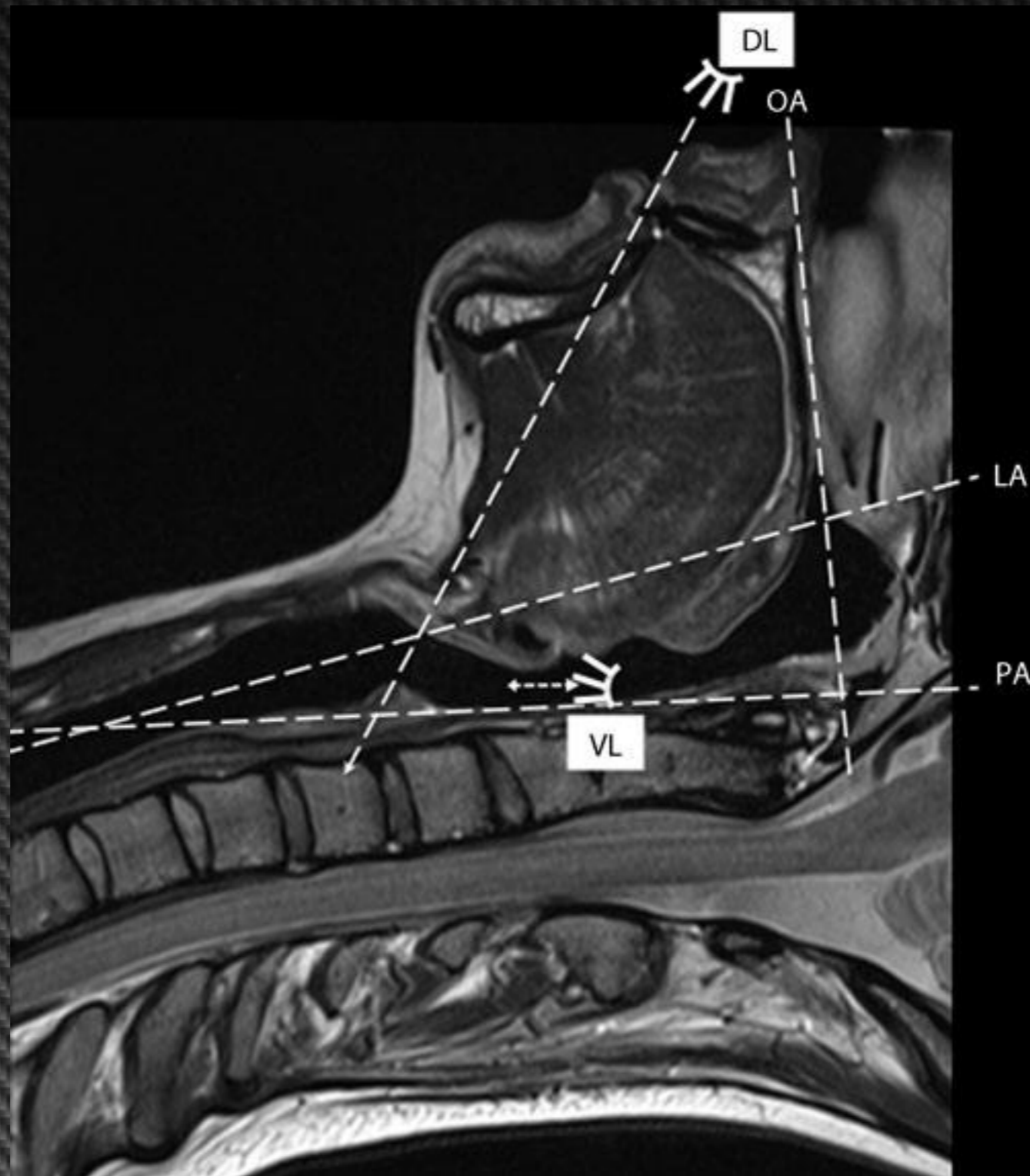
Channelled	Unchannelled
Airtraq	Glidescope
Kingvision	CMAC
Pentax AWS	McGrath
	AP Advance



Advantages

- Training aid and supervision
- Rescue for the unanticipated difficult airway
- Primary use in the anticipated “difficult airway”
- Teleintubation???

Advantages

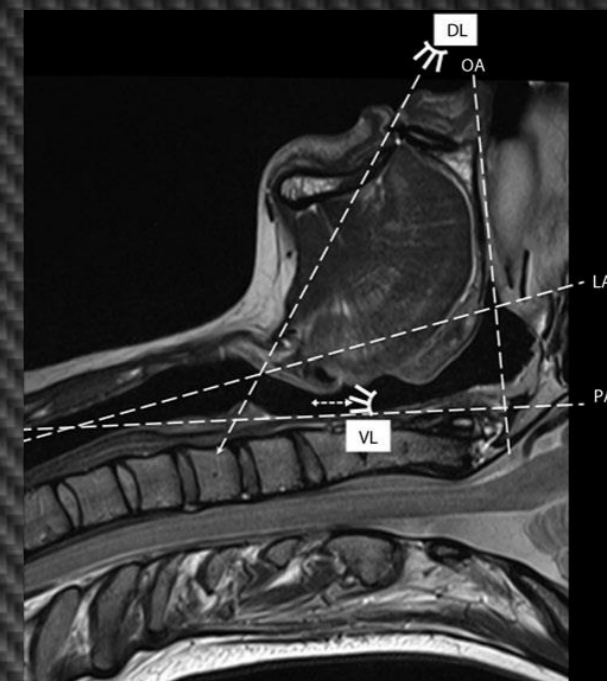


Advantages

- Cervical Spine
 - Reduced Movement
 - Reduced Force

	AWS	Macintosh	P-value
Occiput-C1 (n=12)	10° (6.0-22.5)	15°* (6.0-21.5)	0.041
C1-C2 (n=13)	4.5° (1.0-8.0)	7.0°* (2.0-11.0)	0.0079
C2-C3 (n=13)	-0.5° (-14.5 to 8.0)	1.5° (-9.0 to 10.5)	0.075
C3-C4 (n=12)	0.5° (-6.0 to 9.5)	3.0°* (-4.5 to 13.5)	0.005

13.5° 30.5°



Advantages

- Better visualisation of the airway
- More likely to recognise oesophageal intubation
- See other airway pathology - FB, tumour



Disadvantages

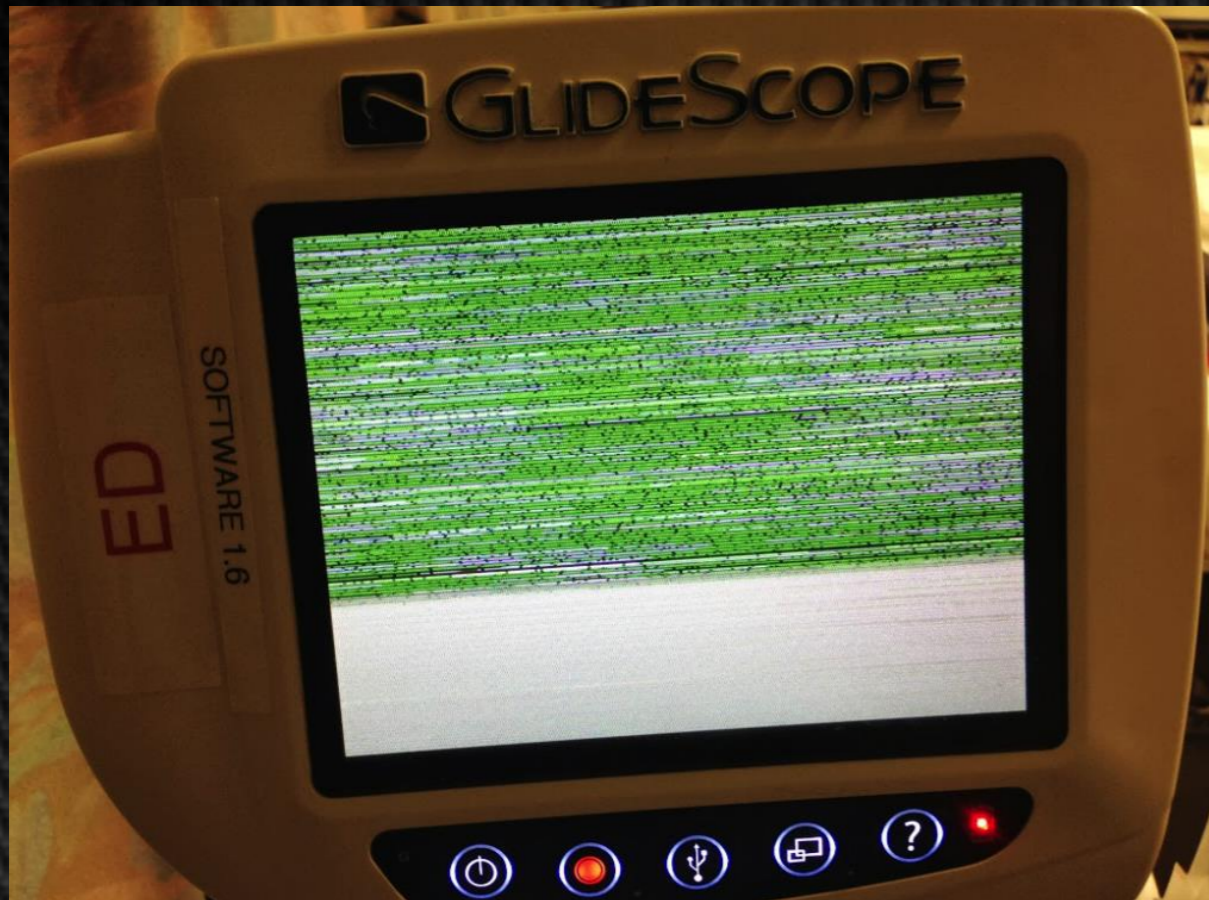
- It takes longer!
- No advantage for experienced users
- Little crossover between VLs

Disadvantages

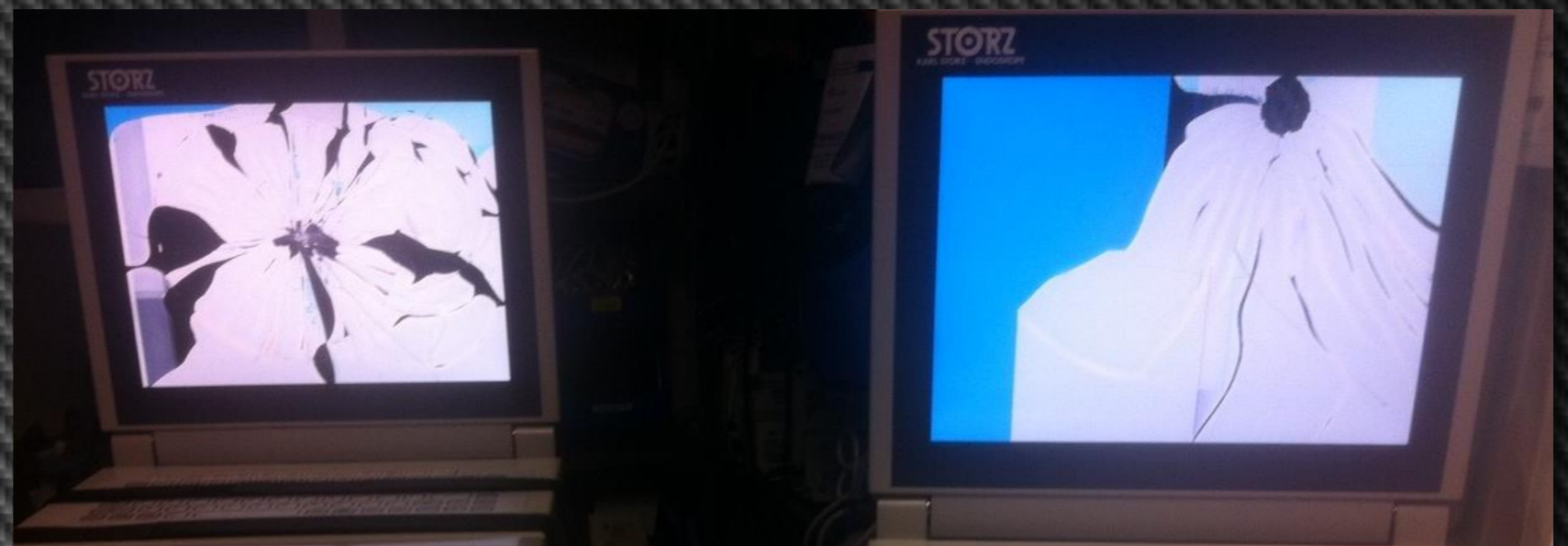
- Cost



Disadvantages

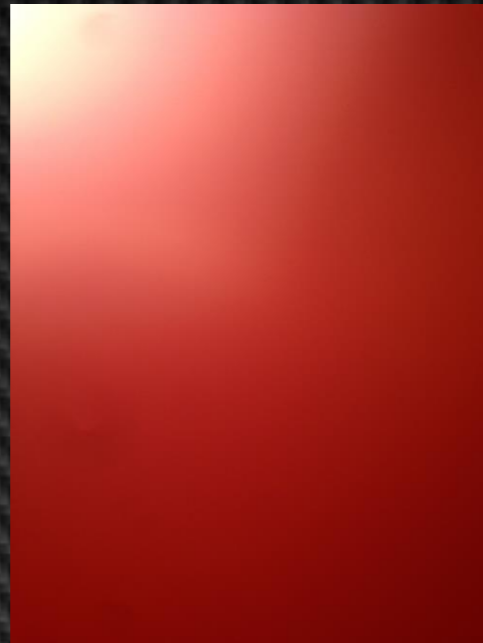


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Disadvantages



QuickTime™ and a
H.264 decompressor
are needed to see this picture.

- Situational Disadvantages



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Safety

Verathon, Inc., GlideScope Video Laryngoscope (GVL) 3, 4, 5 and GlideScope (AVL) 2, 3, 4 and 5 Reusable Blades: Class I Recall - Risk of Blade Tip Breakage and Premature Failure

Morbidity?

- Direct Trauma
- Delayed Intubation

Morbidity

- Survival?
 - No mortality difference overall
 - HIGHER mortality in Severe Head Injury
 - Longer time to intubate
 - Greater Incidence of Hypoxia

Alternatives

- iLMA
- Flexible Fibrescope



Where to from here?

- Decision trees and scoring systems
 - DL
 - VL
 - FO

Where to from here?

- Further research
 - Newer Laryngoscopes
 - Expert users of Video Laryngoscopes
 - DL/VL combination laryngoscopes

What to choose?

- Airtraq
- Kingvision
- Glidescope
- CMAC

VOTE?

Summary

- Video laryngoscopes are great for training and difficult airway rescue
- Longer time to intubation - ?increased morbidity and mortality
- Use may be restricted by other factors

Thank You

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Questions?