THE ROYAL LONDON HOSPITAL

Introduction to Laryngoscopes



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What?



A laryngoscope is a device used to directly visualise the vocal cords to allow insertion of an endotracheal tube. It can also be useful for insertion of a gastric tube or transoesophageal echo probe as it lifts the larynx forwards. This

approach relies on a direct and unimpaired line of sight from the eye of the operator to the patient's glottis.

What are the different blades?

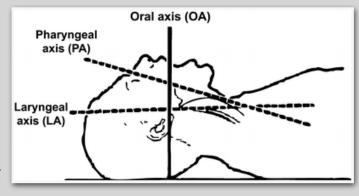
- Macintosh. Commonest; blade attaches to handle at 90 degrees; Size 3 and 4; Size 3 has more of a curve to it; size 4 is longer
- Kessel. Like the Macintosh but attaches to handle at 110 degrees.
- McCoy. Macintosh-like blade with a moveable distal tip segment, flexed by a lever controlled by the thumb of the hand holding the handle to displace the larynx forwards.
- Magill. Straight blade with U-shaped cross section, used predominantly in children

Are handles all the same?

- Standard size
- Short size. Best for obese, obstetric, barrel chest. Often used with Kessel blade.

Limitations?

Direct laryngoscopy (DL) relies on line of sight- the oral and laryngeal axis need to align, which can be very difficult or impossible.



Indirect laryngoscopy is used to 'look around the corner' when these axes don't align. This is very useful,

particularly in trauma patients whose necks should not be overextended. DL can only be seen by one person and not shared with the team. Video laryngoscopes are therefore also useful for teaching and team support.

What's a video laryngoscope?



A video laryngoscope (VL) is a device used to indirectly visualise the vocal cords. Video laryngoscopes use video camera technology focused at the laryngeal inlet to capture an image close to the vocal cords and display it on a screen either directly attached to the laryngoscope or remotely. However, while a good view may be easier to achieve, it may still be difficult to insert the tube. There are different brands of VL available.

In ITU and theatres: C-MAC. Choice of 2 blade types: standard macintosh blade (size 3 and 4) and curved D blade which is often preferred as the standard macintosh blade could be used as a direct laryngoscope. Loading the tube with a properly formed stylet is crucial when using a D-blade and should be bent into the same curve as the

video laryngoscopy blade.

In ED: C-MAC & Airtraq in airway trolleys. (An optical laryngoscope in which an image is generated by a series of optical lenses and prisms). No screen attached. Preload the endotracheal tube before starting.

Familiarise yourself with all equipment prior to relying on it in an emergency situation.