

تقنيات اجهزة تخدير الكورس الاول

LARYNGOSCOPE

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قسم تقنيات التخدير

Stage 3

المرحلة الثالثة

محاضرة رقم 6

الجانب النظري

Lecture No6.

Theoretical

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LARYNGOSCOPY

Laryngoscopes: These devices are used to perform direct **laryngoscopy** and to **aid in tracheal intubation**.

Type of laryngoscope:

1. **Direct laryngoscopy**
2. **Indirect Laryngoscopy**

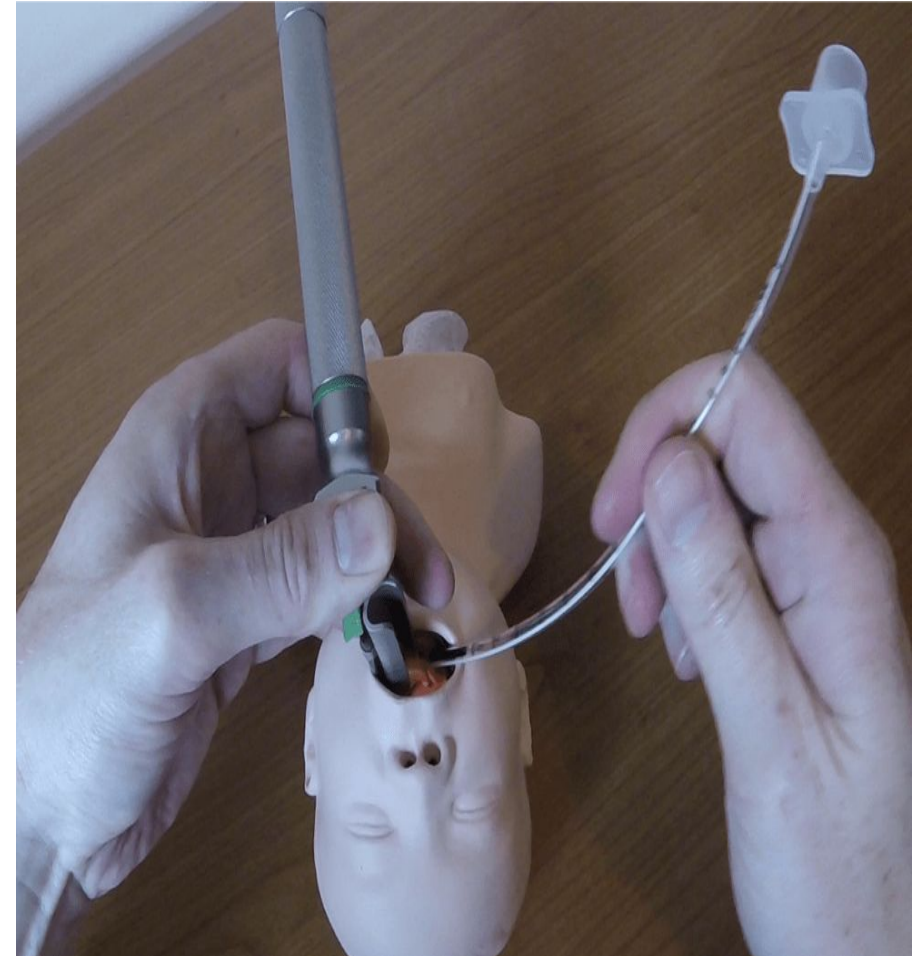


1-Direct laryngoscopy:

Components:

1.The **handle** houses the power source (batteries) and is designed in different sizes.

2.The **blade** is fitted to the handle and can be either **curved or straight**. There is a wide range of designs for both **curved and straight blades**.



TYPE OF BLADES:

Blade	Characteristics	Uses/Advantages
Macintosh	Curved blade	Most commonly used curved blade; normal airway
Miller	Straight with curved tip	Normal airway; large floppy epiglottis
McCoy or CLM levering	Macintosh design	Articulating distal tip; improves epiglottis lift
Wisconsin, Guedel	Straight blades	Higher flange height; easier to pass tracheal tube
Belscope	Double-angle blade, prism attachment	Normal airway; improved glottic view; minimizes dental contact
Siker	Angled blade	Mirrored surface to reflect anterior glottic structures
CLM = Corazelli-London-McCoy blade		

MECHANISM OF ACTION:

1. Usually the straight blade is used for intubating neonates and infants. . There are larger size straight blades that can be used in adults.
2. The curved blade (Macintosh blade) is designed to fit into the oral and oropharyngeal cavity.
3. In more recent designs, the bulb is placed in the handle and the light is transmitted to the tip of the blade by means of fibreoptics



4. A **left-sided Macintosh** blade is available. It is used in patients with **right-sided facial deformities** making the **use of the right-sided blade**

5. The **McCoy laryngoscope** is based on the standard Macintosh blade. It has a hinged tip which is operated by the lever mechanism present on the back of the handle. It is suited for both routine use and in cases of **difficult intubation**.



PROBLEMS IN PRACTICE AND SAFETY FEATURES

1. The risk of trauma and bruising to the different structures (e.g. epiglottis) is higher with the straight blade.
2. It is of vital importance to check the function of the laryngoscope before anaesthesia has commenced. Reduction in power or total failure due to the corrosion at the electrical contact point is possible.



Fig. 37 Tull (suction) laryngoscope

3. Patients with large amounts of breast tissue present difficulty during intubation. To overcome this problem, specially designed blades are used such as the polio blade.

4. To prevent cross-infection between patients, a disposable blade is used. A PVC sheath can also be put on the blade of the laryngoscope.



2- Indirect Laryngoscopy:

- ❖ Optical Stylets
- ❖ Rigid Fiberoptic Laryngoscopes
- ❖ Rigid Video Laryngoscopes



