

تقنيات اجهزة تخدير الكورس الاول

Laryngeal mask airway

Sawa University

College of health and medical techniques

Department of Anesthesia

Stage 3

جامعة ساوة الاهلية

كلية التقنيات الصحية والطبية

قسم تقنيات التخدير

المرحلة الثالثة

محاضرة رقم 3

Lecture No 3.

الجانب النظري

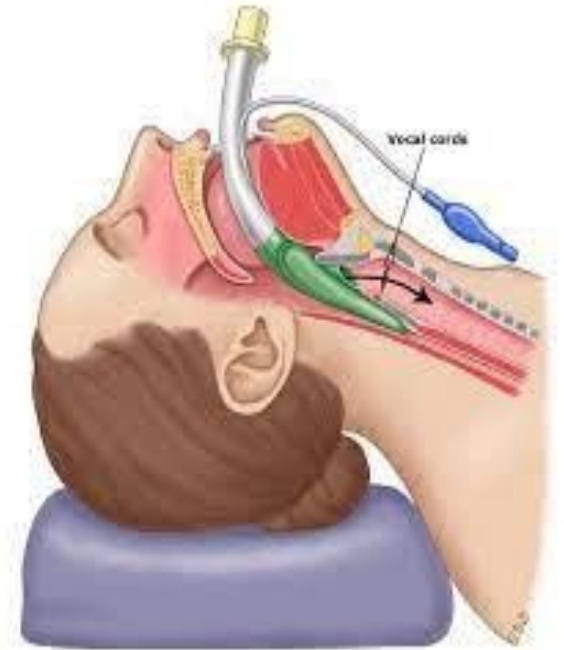
Theoretical

استاذ المادة : م . د سامي رحيم حسن

Supraglottic Airway

Devices:

- devices that ventilate patients by delivering anesthetic gases/oxygen above the level of the vocal cords
- They sit outside the trachea and provide a hands free means of gas tight airway.
- The original laryngeal mask airway (LMA Classic) was introduced in 1988 by the British anesthetist ,Dr Archie Brain.



A Video Laryngoscope



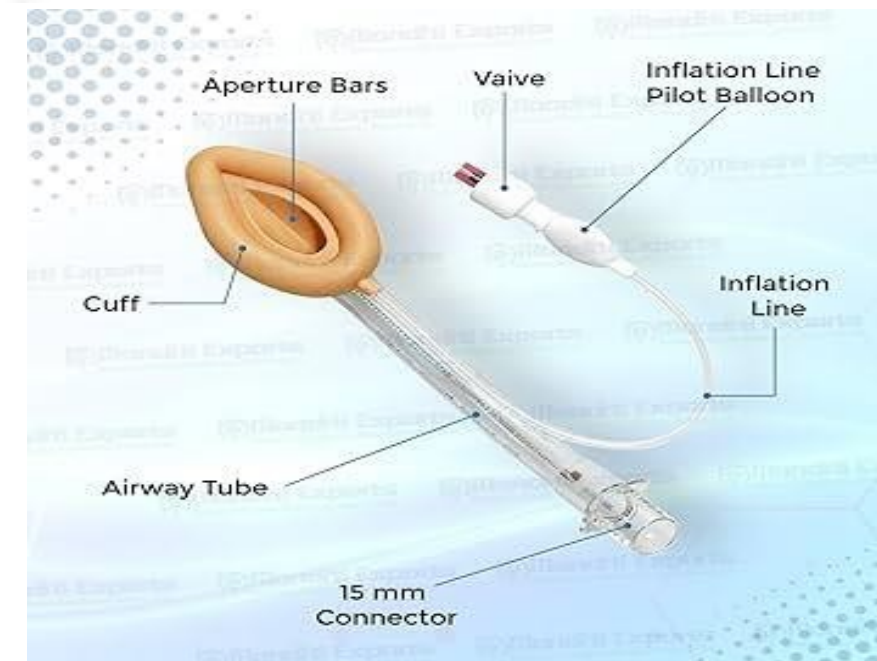
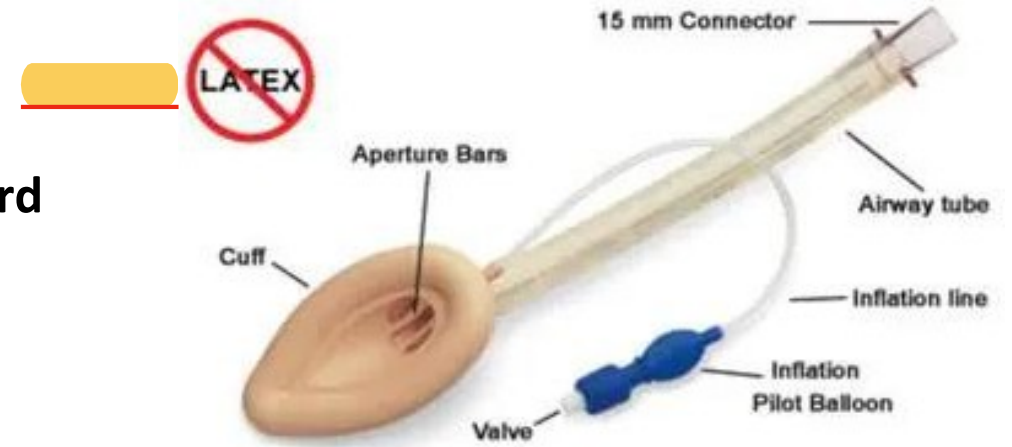
B Supraglottic Airway Device



Laryngeal mask airway (LMA):

consist of :

1. A wide-bore tube whose proximal end connects to a standard **15-mm connector**.
2. An **elliptical cuff** that can be inflated through
3. A **pilot tube**
4. **Aperture bars**



Advantage of LMA :

1. Increased speed and ease of placement .
2. Improved hemodynamic stability at induction and during emergence .
3. Reduced anesthetic requirements for airway tolerance .
4. lower frequency of coughing during emergence .
5. Improved oxygen saturation during emergence .
6. lower incidence of sore throats in adults.

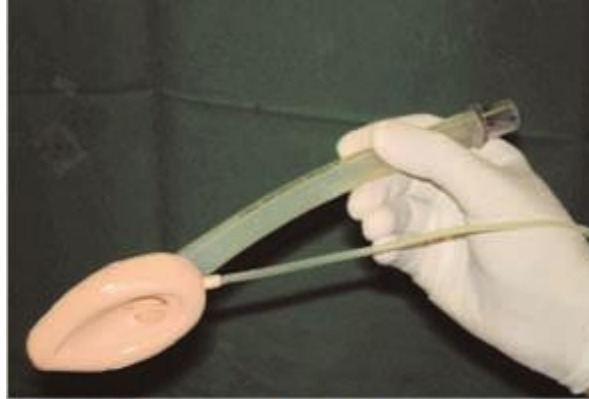
Disadvantages of LMA over the ETT:

1. lower seal pressure.
2. Higher frequency of gastric insufflation.



Technique for inserting LMA:

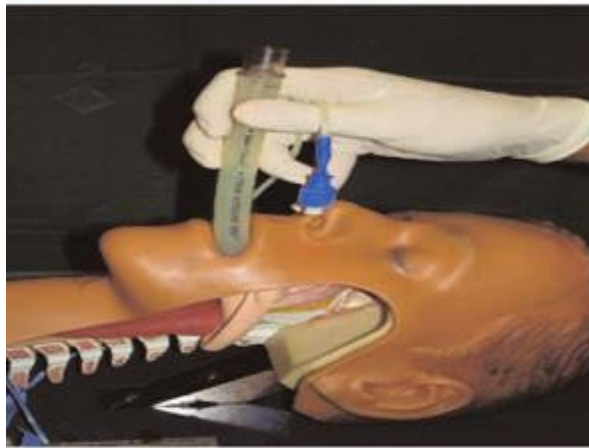
1. Apply water-soluble gel to the back of the cuff.
2. Fully deflating the cuff.
3. Hold the LMA like a pen, with the index finger placed anteriorly at the junction of the cuff and tube



Step-I (Holding of LMA)



Step-II (LMA cuff facing towards nose)



Step-III (Rotated LMA positioned at pharynx)



Step-IV (Rotation of LMA at 180°)



Step-V (Placement of LMA at correct position)



Step-VI (LMA cuff inflation)

CLASSIFICATION

- Single Lumen Devices

LMA-classic

LMA-unique

LMA- flexible .

LMA Classic™

The original, re-usable, first generation airway invented by Dr Archie Brain.



LMA Unique™

A versatile, single use, first generation airway used in millions of surgical cases each year.



LMA Flexible™

A truly flexible device suitable for shared airways and designed to protect the glottis and trachea from blood and secretions from above.

re-usable and single use



Double Lumen Devices:

Proseal LMA



Combitube



Laryngeal Tube Suction



Triple Lumen Device: Elisha Airway Device

Elisha Airway device :

- Made of silicone, free of latex.
- 3 functions in a single device :
 - I. ventilation
 - II. blind/ or fibre-optic aided intubation without interruption of ventilation.
 - III. gastric tube insertion



Table 1. Recommended Sizing for the LMA[®] Classic[™] and LMA[®] ProSeal[™], Based on Patient Weight^{47,48}

Laryngeal Mask Size	Patient Weight (kg)	Max Cuff Volume (mL)
1	< 5	4
1.5	5-10	7
2	10-20	10
2.5	20-30	14
3	30-50	20
4	50-70	30
5	70-100	40



Information available from LMA[®] product brochures.



THANK YOU