## **ARWAY MANAGEMENT** PRESENTATION: ASHIK SHAMSUDEEN

## Overview

- Background
- Assessing the airway
- Opening/ clearing the airway
- Manual ventilations
- LMAs
- Endotracheal intubation
- Surgical methods

## BACKGROUND



 Skillful airway management is often the first step in the successful resuscitation of a compromised patient. Neurologic damage caused by hypoxia occurs within minutes. Non-definitive methods (basic airway management) are very important and will, *if performed correctly*, provide good oxygenation. Remember, people die from lack of oxygenation, not from lack of intubation.

## **ASSESSING THE AIRWAY**

### Patent airway

- \* look
- \* listen
- \* feel
- Ventilation : is the mechanical process of moving air in and out of lungs and (CO2 and O2)
- Oxygenation: is crossing of air in into alveoli in the blood and onto the hemoglobin molecule

### **ASSESSING VENTILATION**

- Chest movements
- Auscultation
- Respiratory rate
- Et co2

### ASSESSING OXYGENATION

Colour ( cyanosis)

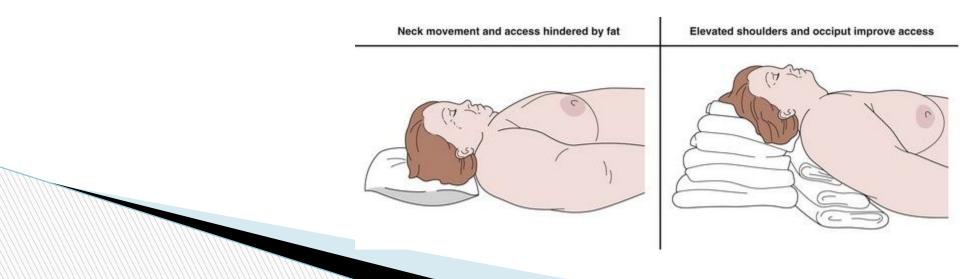
Spo2 (oxygen saturation with pulse oximetry)



A patient may be well oxygenating but poorly ventilating our key focus on adequate oxygenation. We can tolerate sub optimal ventilation provided oxygenation is good

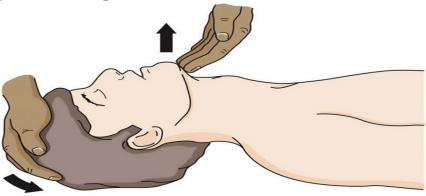
### OPENING THE AIR WAY WITH HEAD POSITIONING AND JAW TRUST

- Adults: Pillow or towel to lift and tilt the head( obese people needs pillow under shoulders also)
- Children: head placed in a neutral position
  Infants : shoulders elevated slightly



### HEAD TILT & CHIN LIFT JAW THRUST

The **head-tilt chin-lift** is the most reliable method of **opening** the **airway**. The simplest way of ensuring an **open airway** in an unconscious patient is to use a **head tilt chin lift technique**, thereby **lifting** the tongue from the back of the throat.



Its specifically used in cervical spine injuiry patients



## FOREIGN BODY

 Choking is the physiological response to sudden obstruction of airways. Foreign body airway obstruction (FBAO) causes asphyxia and is a terrifying condition, occurring very acutely, with the patient often unable to explain what is happening to them.

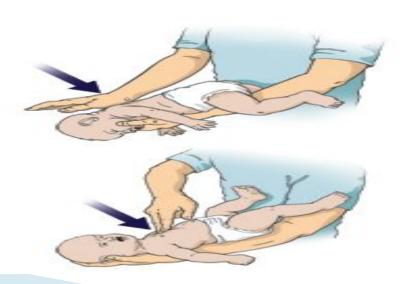
- Back blows if patient if conscious
- CPR if unconscious

Deliver five separate **back blows** between the person's shoulder blades with the heel of your hand. Give 5 abdominal thrusts. Perform five abdominal thrusts (also known as the Heimlich maneuver). Alternate between 5 **blows** and 5 thrusts until the blockage is dislodged

 Continue alternating five back blows and five chest thrusts until the object is forced out or the baby starts to cough forcefully, cry, breathe, or becomes unresponsive.
 If a baby who is choking on something becomes unconscious, lower the baby to the ground and start CPR

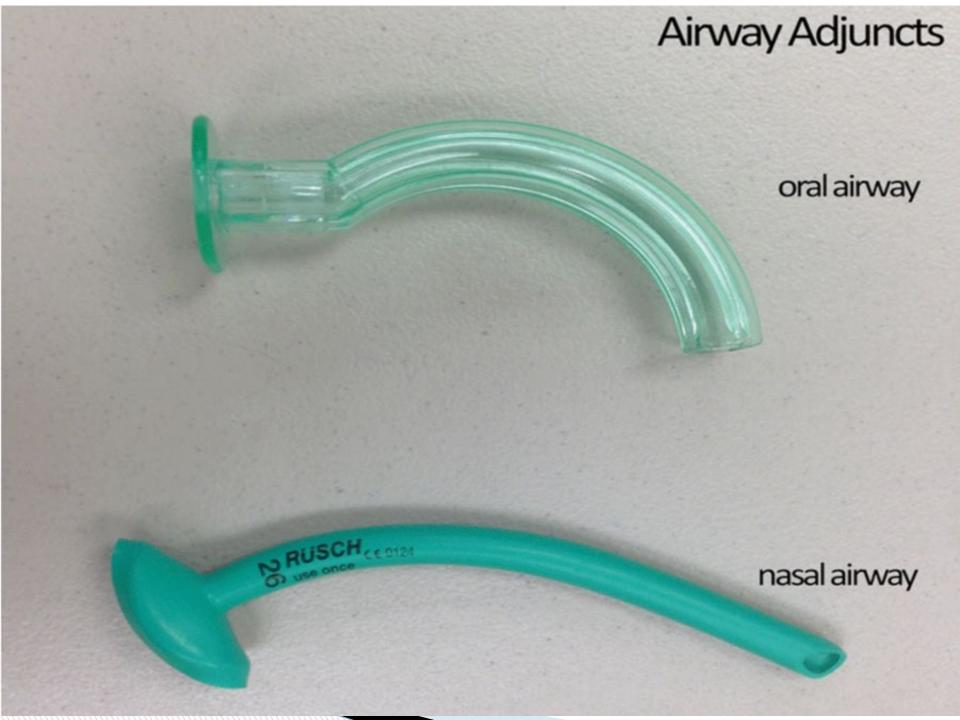






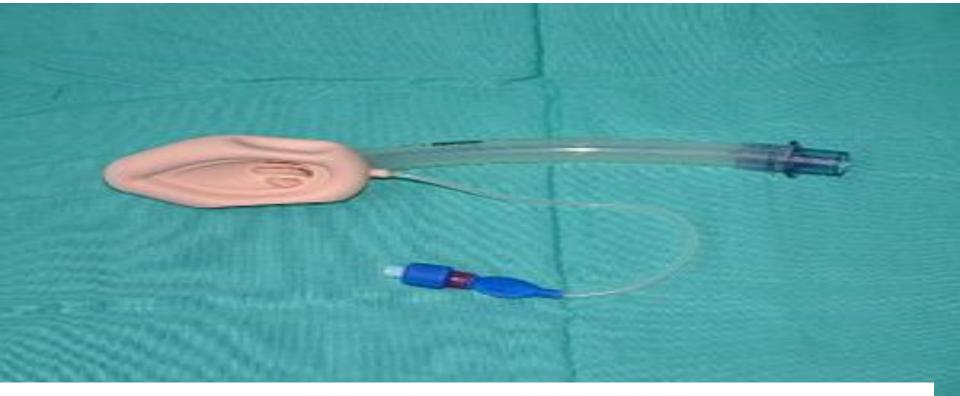
## **AIRWAY ADJUNCTS**

Airway adjuncts. Once an open airway has been established, the physician may choose to use either an oropharyngeal or nasopharyngeal airway to make it easier to maintain an open airway. Both of these devices prevent the tongue from occluding the airway and thereby provide an open conduit for air to pass.

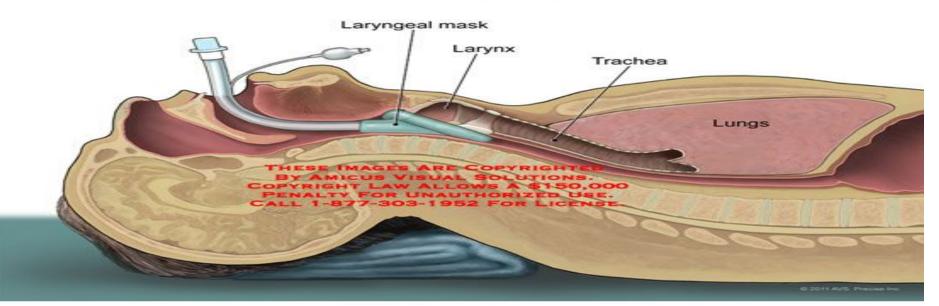


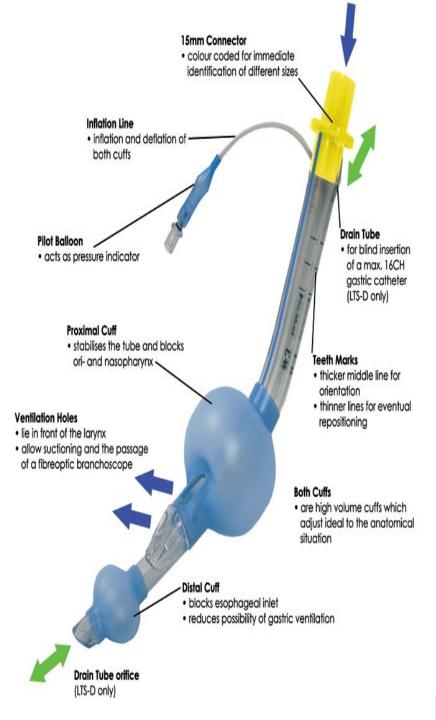
### LMAs

- A laryngeal mask airway (LMA) also known as laryngeal mask — is a medical device that keeps a patient's airway open during anaesthesia or unconsciousness. It is a type of supraglotic airway.
- A laryngeal mask is composed of an airway tube that connects to an elliptical mask with a cuff which is inserted through the patient's mouth, down the windpipe, and once deployed forms an airtight seal on top the glottis (unlike tracheal tubes. which pass through the glottis) allowing a secure airway to be managed by a health care provider.



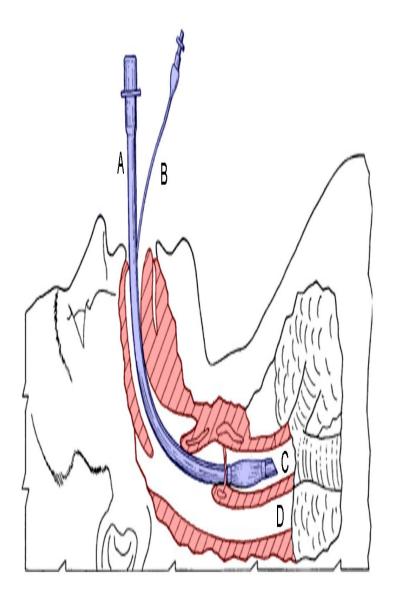
#### Laryngeal Mask Airway (LMA)





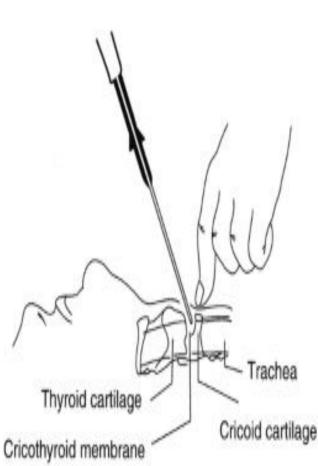
The laryngeal tube (known as the King LT in the U.S.) is an airway management device designed as an alternative to other airway management techniques such as mask ventilation, laryngea I mask airway, and tracheal intubation.

### Endotracheal intubation is a medical procedure in which a tube is placed into the windpipe (trachea) through the mouth or nose. In most emergency situations, it is placed through the mouth. Whether you are awake (conscious) or not awake (unconscious), you will be given medicine to make it easier to insert thetube.



# Cricothyroidotomy

- Cricothyroidotomy, also known as cricothyrotomy, is an important emergency procedure that is used to obtain an airway when other, more routine methods
  - (eg, <u>laryngeal mask airway</u> [LMA] and endotracheal intubation) are ineffective or contraindicated. Establishing an effective airway in the face of medical emergencies is a skill that healthcare providers must master to prevent patient morbidity or mortality.



### **THANK YOU**