

Intubation Procedures

Presenter:
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Objectives

- Spell and define key terms
- Identify airway landmarks
- State the purpose of endotracheal intubations
- Identify equipment used to perform procedure
- Demonstrate procedure on Manikins



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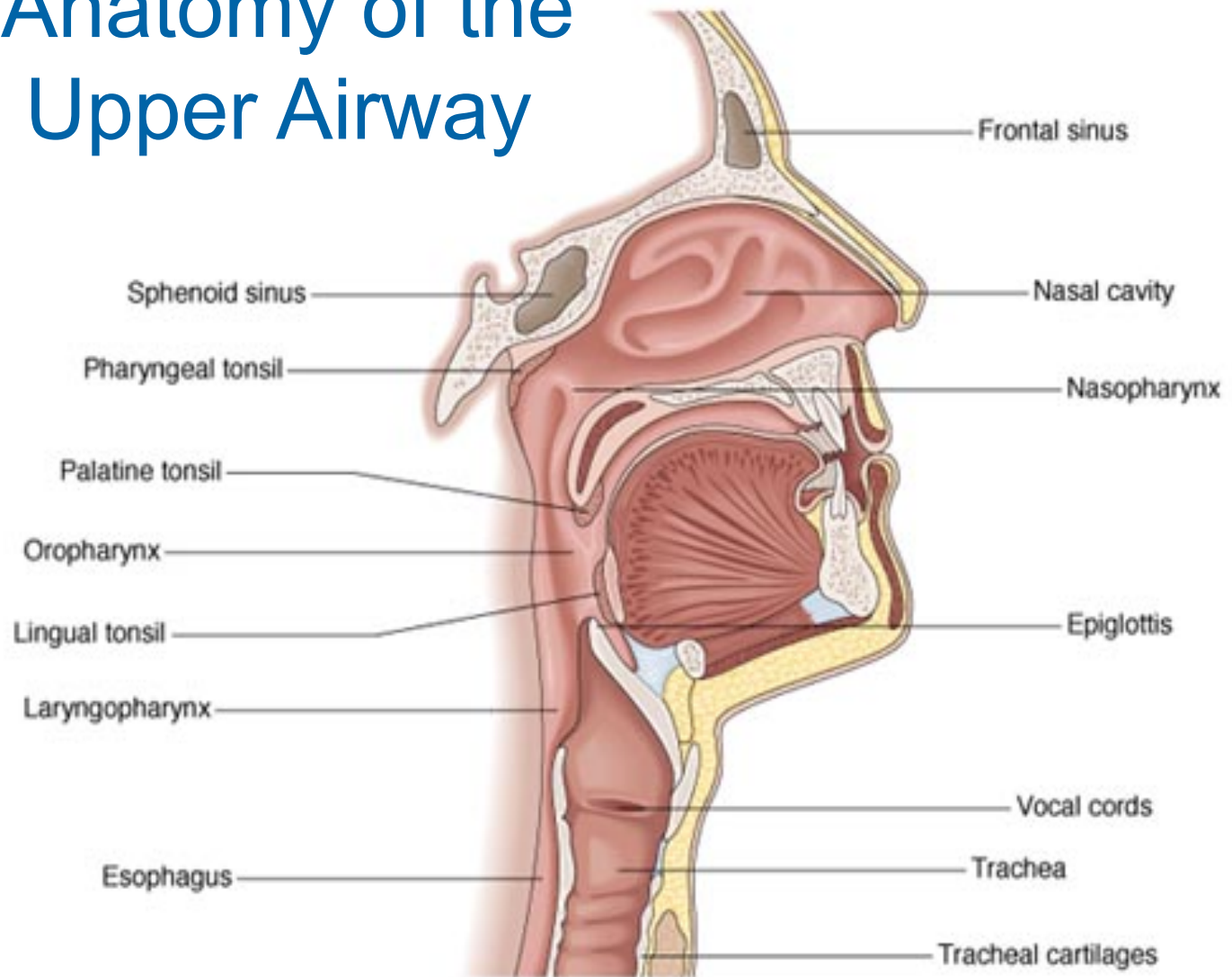
Key Terms

- Endotracheal Intubations – procedure that provides complete control over the airway
- Endotracheal tube (ET tube) – tube passed through the mouth or nose into the patients trachea to ventilate the lungs
- Laryngoscope – instrument used to perform the intubation procedure – consists of a handle containing batteries and a blade with a tiny light bulb to permit visualization of the structures in the throat when the ET tube is inserted
- Stylette – a wire inserted into ET tube to reduce flexibility
- Epiglottis – leaf shaped elastic cartilage that attaches to the thyroid cartilage – lies flat against the anterior pharyngeal wall
- Yankauer suction



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Anatomy of the Upper Airway



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Structures of the upper
respiratory tract.

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The Respiratory System

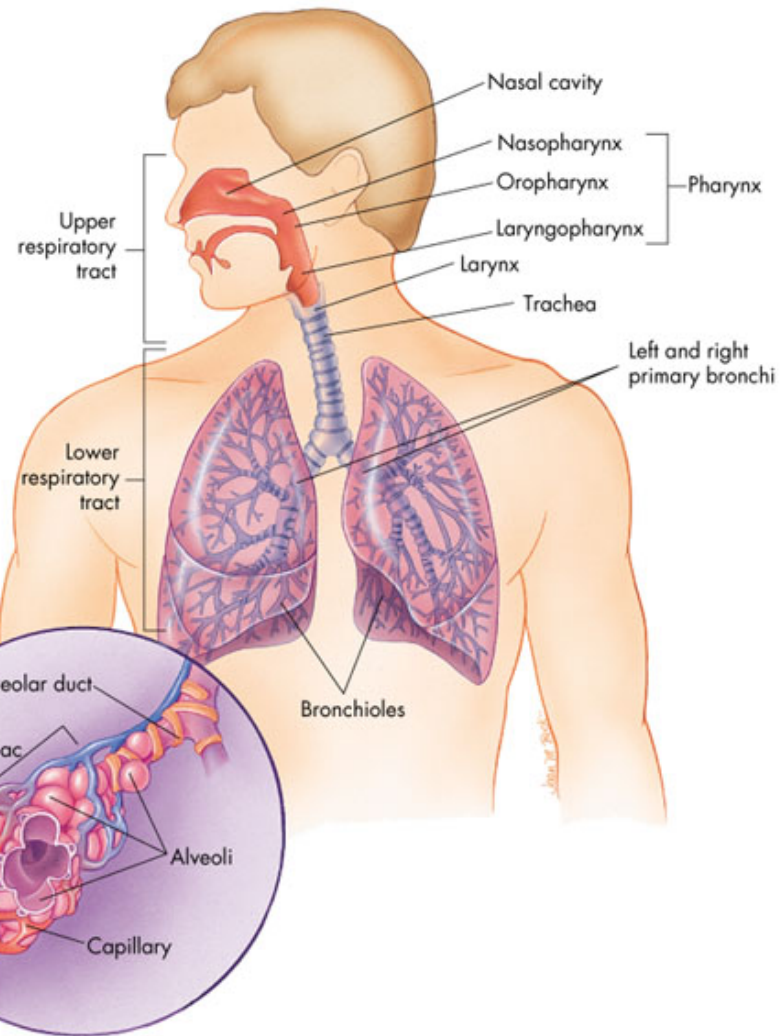
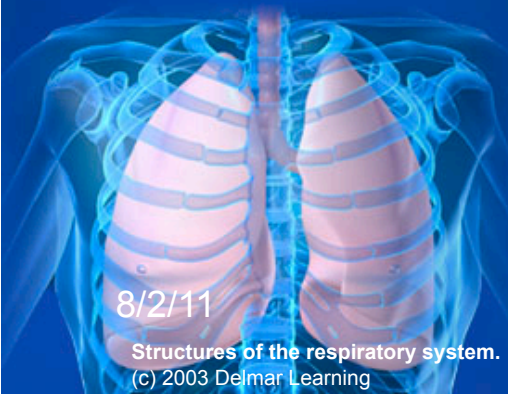
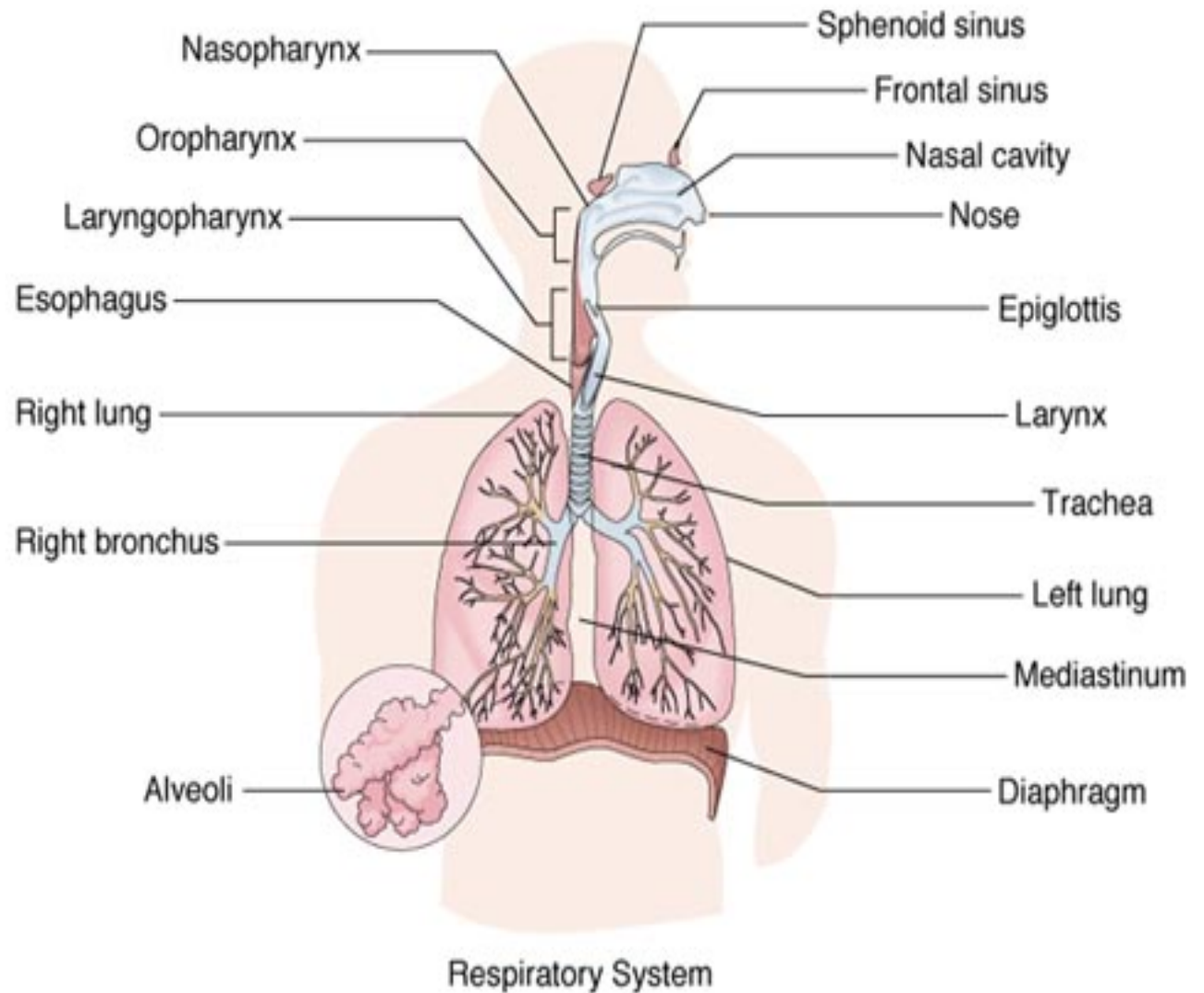


Image 206 Structural plan of the respiratory organs showing the pharynx, trachea, bronchi, and lungs

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The Respiratory System



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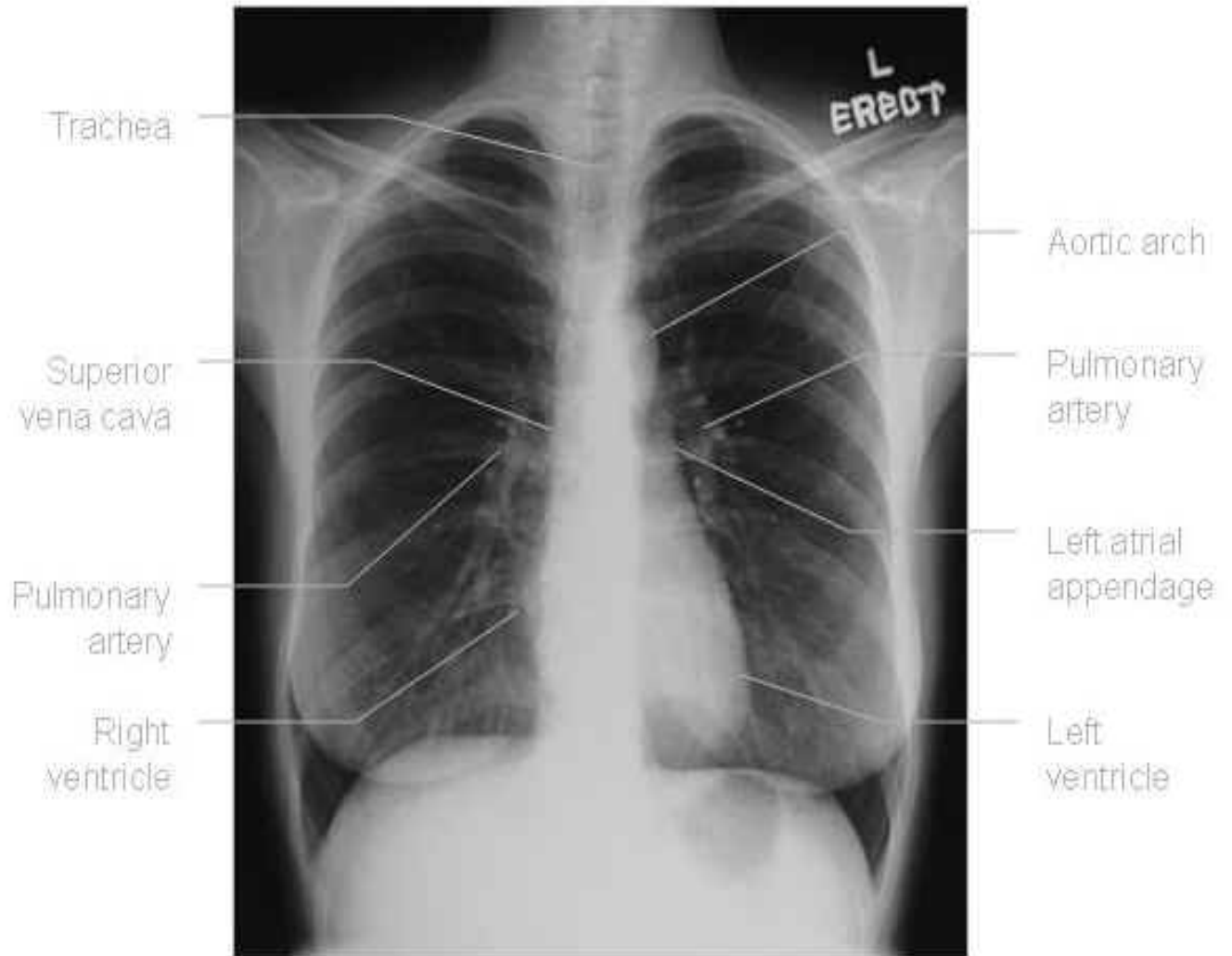
Structures of the respiratory system.
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Structures of the upper
respiratory tract.

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Labeled Chest X-Ray



Purpose of Endotracheal Intubations

- Done for surgical procedures in which the patient receives general anesthesia (patient is completely sedated)
- Performed in some emergencies such as codes, or airway trauma

Advantages of Endotracheal Intubation:

1. Protects the airway from aspiration
2. Allows for intermittent ventilation with 100% Oxygen
3. Makes the trachea available for suctioning
4. eliminates potential for gastric distention



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Equipment Used

- Disposable exam gloves
- PPE - Mask, face shields, gowns etc.
- Kelly clamp or hemostat
- Magill forceps – to remove foreign object or used for nasotracheal intubation
- Water soluble lubricant
- Suction set up with flexible catheter/suction kit & Yankauer
- Tape 1 and 2 inch sizes or ET tube holder
- Tincture of Benzoin solution & cotton applicators
- Oral airways
- Stethoscope
- Bag-valve mask apparatus
- Humidified oxygen source sterile gauze pads



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Equipment Used cont.

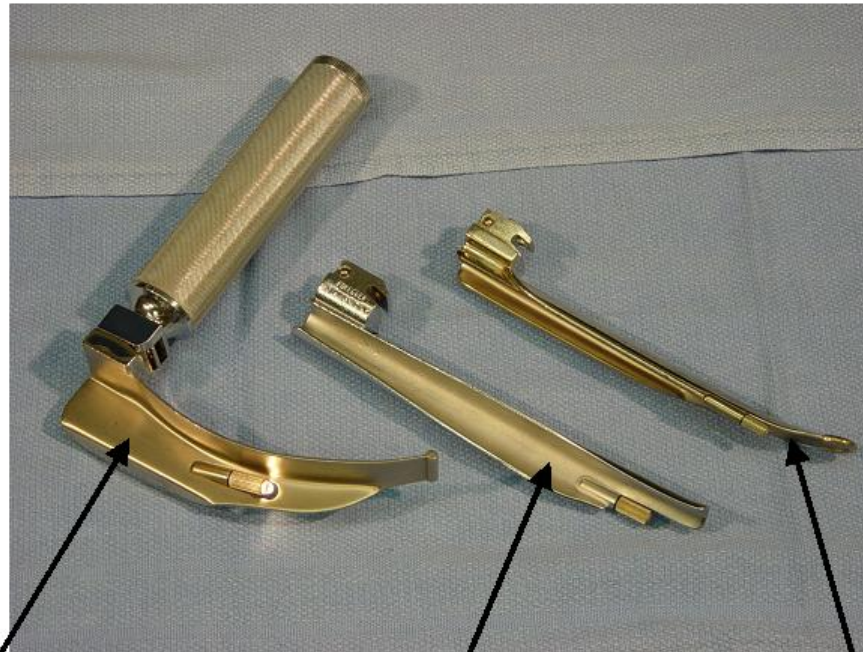
Laryngoscope handle and blades -The laryngoscope and blade should be assembled before attempting to intubate.



Blades



Airway Equipment



Macintosh blade
with handle

Wisconsin blade

Miller blade

http://www.capanes.com/images_old/OTT.jpg

Equipment Used cont.

- Endotracheal tubes in various sizes
- Stylette
- 10ml syringe
- Stethoscope



Stylette

Endotracheal tube

pilot balloon

cuff



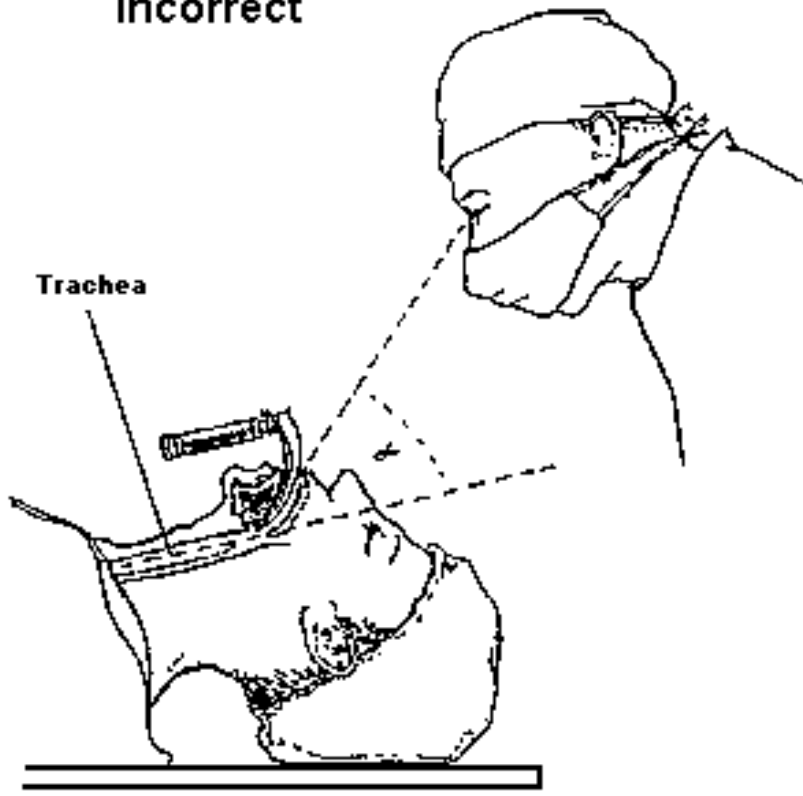
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Procedure

- Patient should be pre-oxygenated before procedure – during a code the patient is bagged while equipment is being set up & before a second attend if initial attempt is unsuccessful
- Equipment should be readily available and within reach
- The patient's head should be in the “sniffing position” the neck is flexed and the head extended
- Open the patient's mouth and insert the laryngoscope and blade to the right of the mouth then move toward the midline – this maneuver moves the tongue out of the way. (laryngoscope is always held in the left hand)
- Lift up and away from you – as you lift you move the epiglottis out of the way to visualize the vocal cords (next slide)
- (if you use a curved blade it is positioned between the base of the tongue and the epiglottis.)

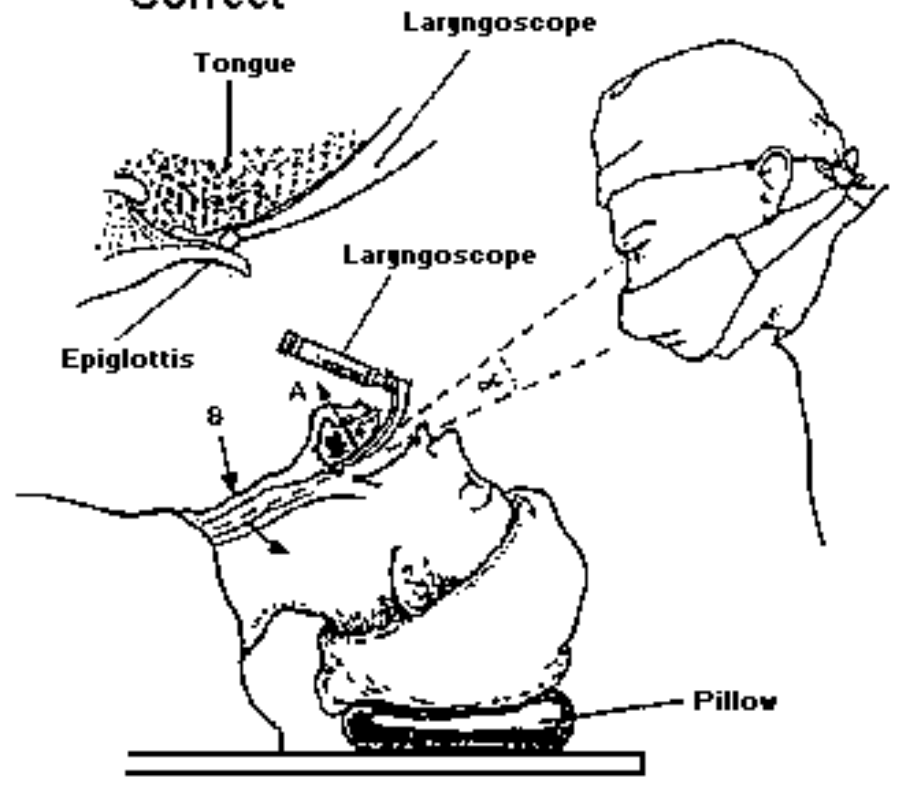


Incorrect



(a)

Correct



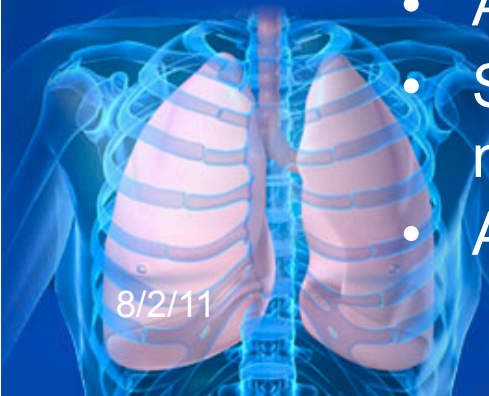
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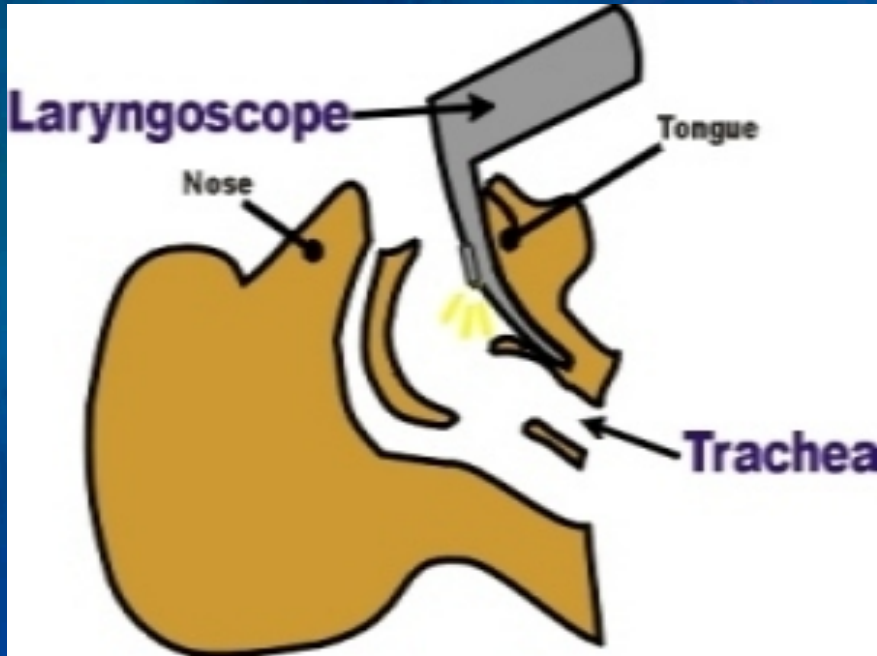
Procedure Cont.

- Use your right hand to introduce the endotracheal tube in the space between the vocal cords it should be advanced approximately 2 inches under direct vision so that the cuff is below the vocal cords.
- An assistant should be ready to stabilize the ET tube
- Remove the laryngoscope & blade
- Remove the Stylette
- An assistant should inflate the pilot balloon on the ET tube
- Attach BVM and ventilate patient
- Auscultate to verify the lungs are being ventilated
- Secure the ET tube in place (tape or tube holder) note number at lip while taping
- An X-ray should be done to confirm placement.



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The right hand is used to introduce the endotracheal tube -

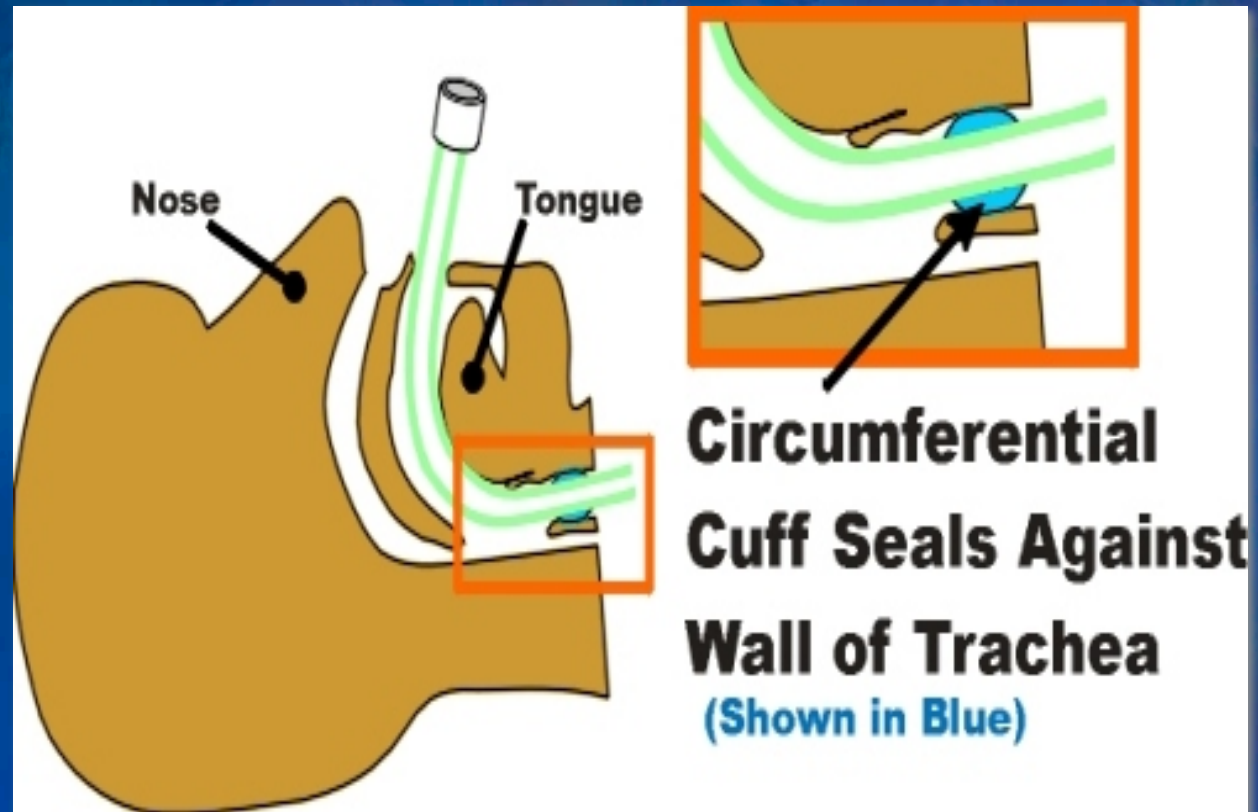


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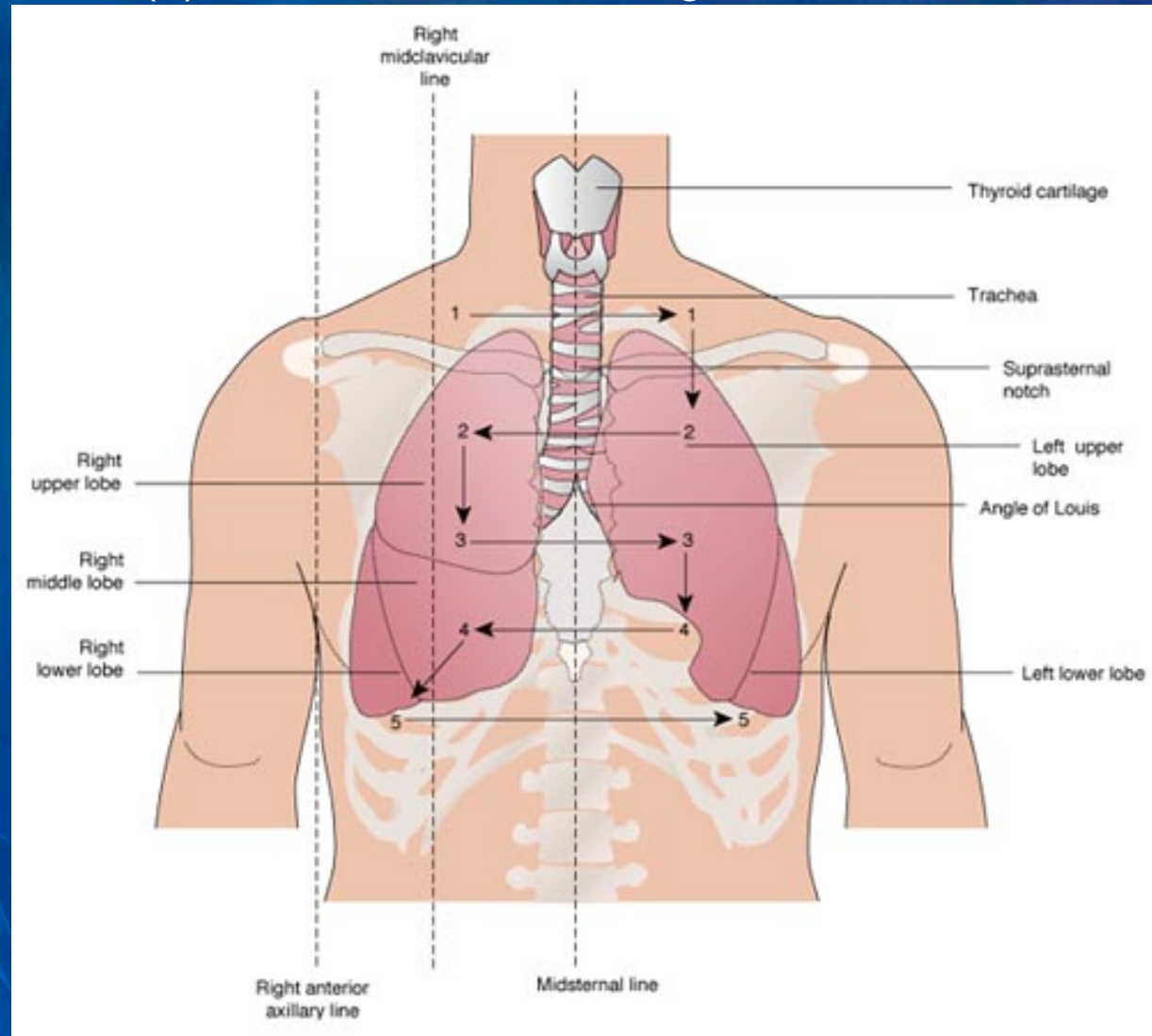
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- The endotracheal tube should be visualized entering the larynx and not the esophagus.
- The position of the cuff should be below the vocal cords.



Symmetrical assessment of breath sounds (anterior).

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References

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THANK YOU!!!



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