Airway Management

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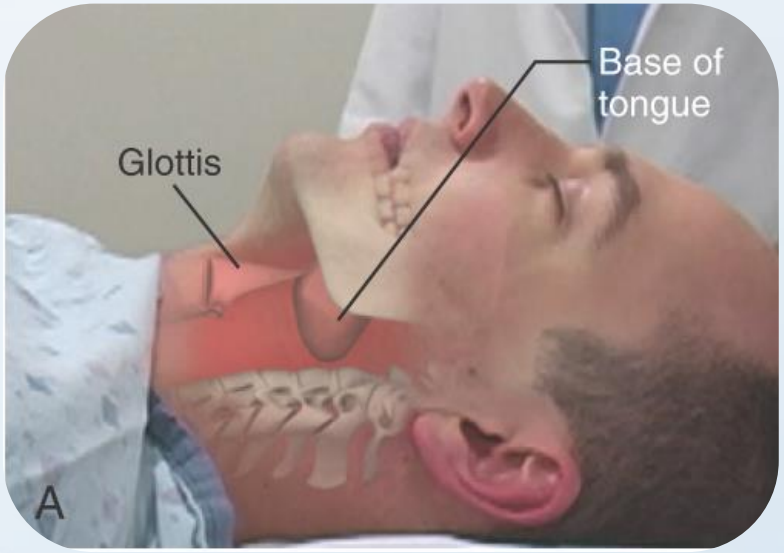
IUMS

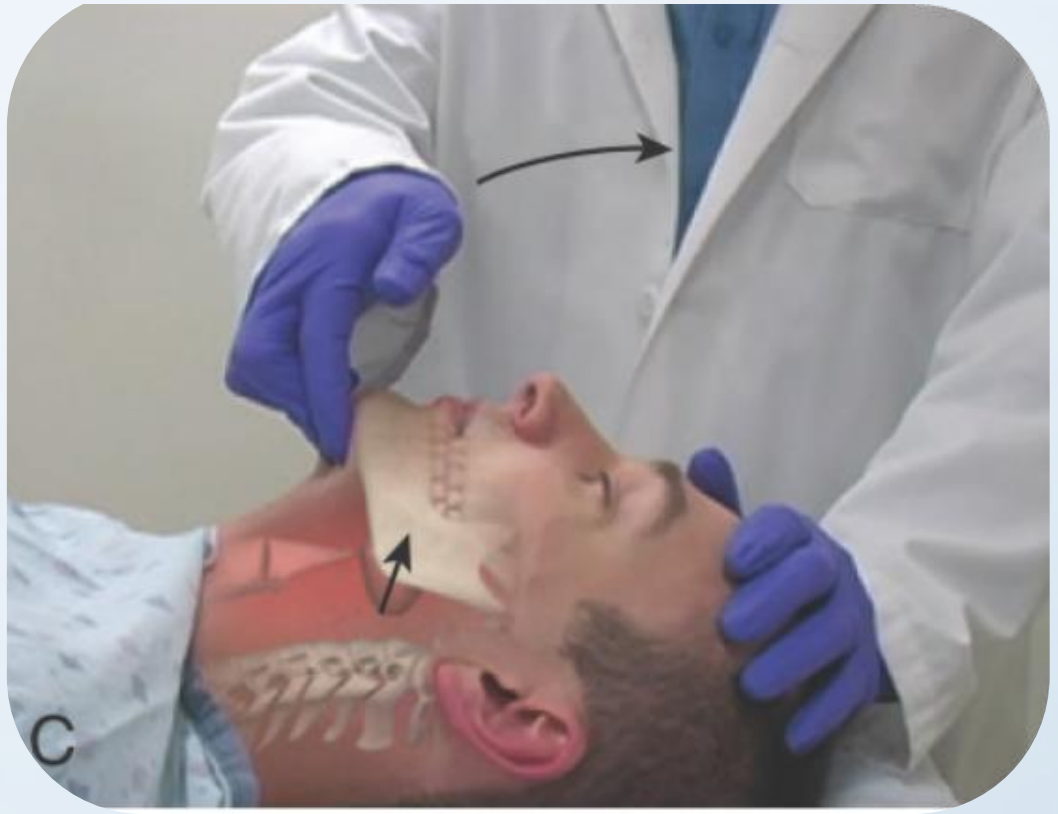
- Manual Airway Maneuvers
- Oropharyngeal Airway Insertion Equipment
- Bag Mask Ventilation

Basic Airway Management



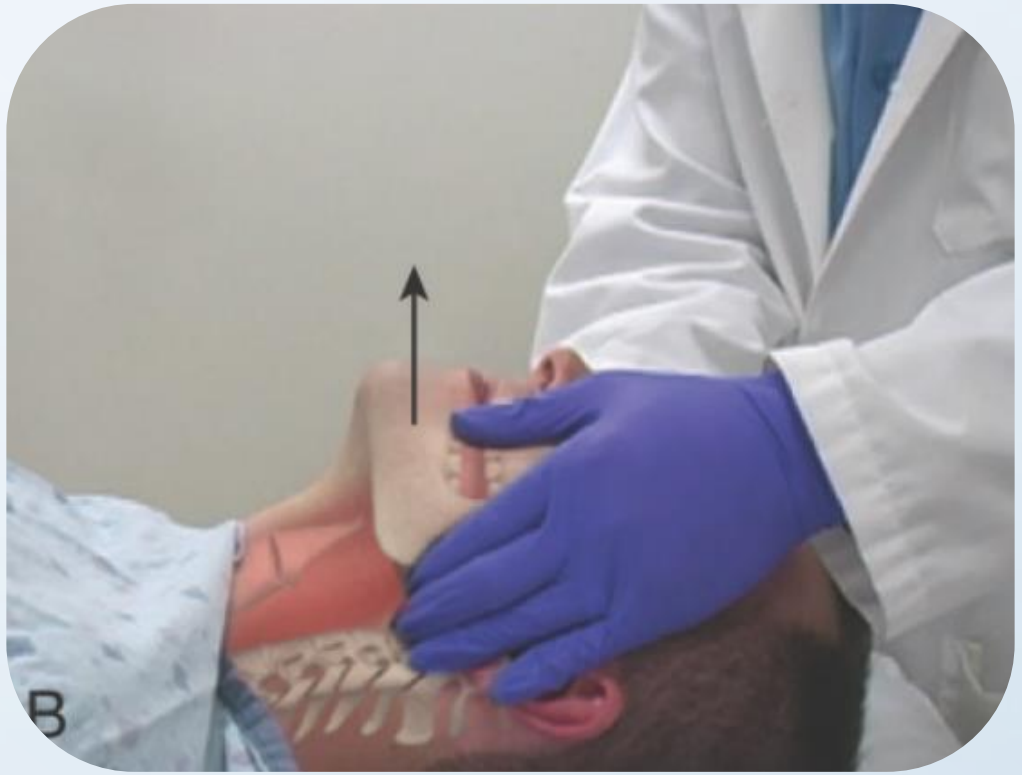
Common cause of The most airway obstruction in an unconscious patient is tongue

Manual Airway Maneuvers

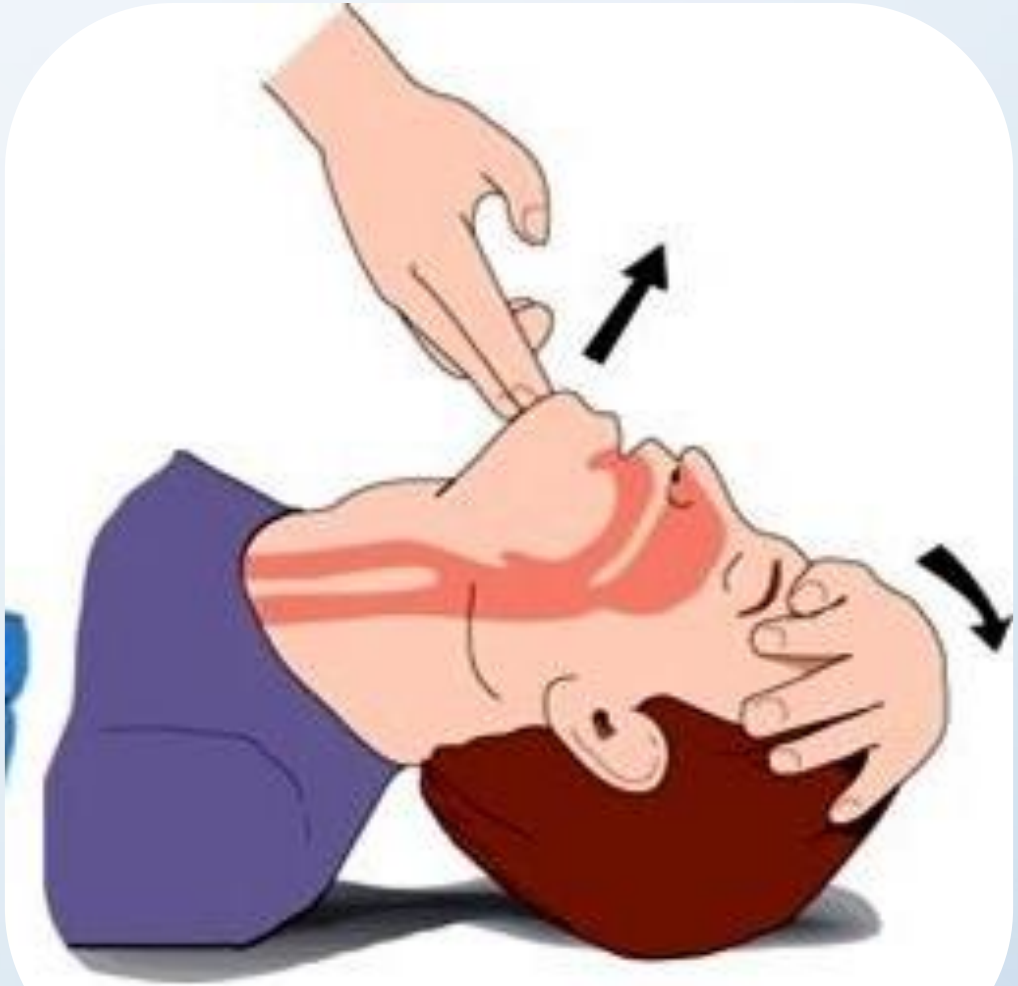


Head tilt/chin lift

Manual Airway Maneuvers



Jaw thrust



Chin lift

Jaw thrust

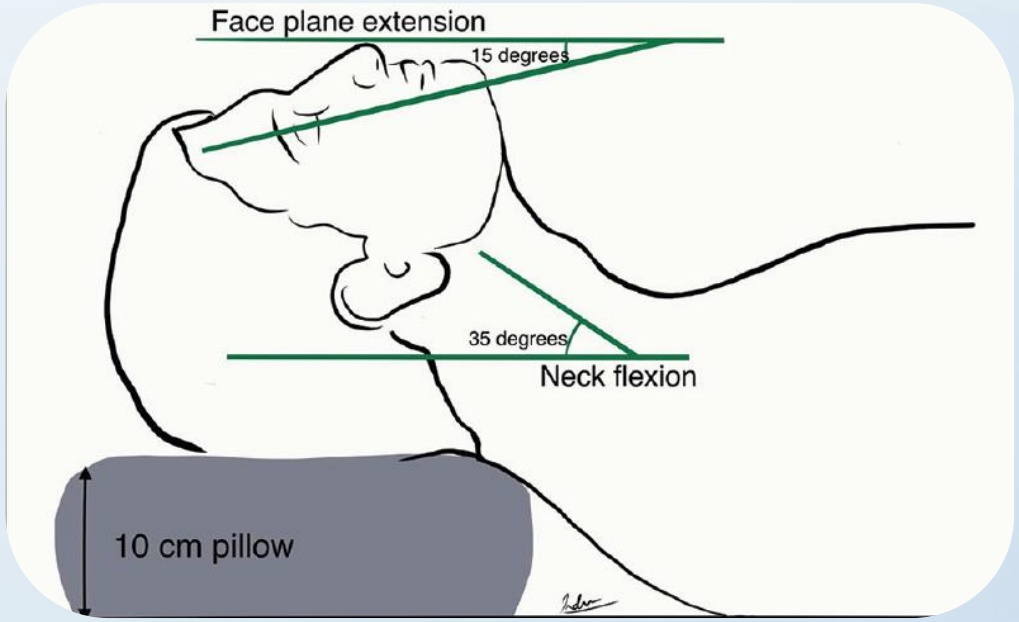
The Triple Airway Maneuver

Head tilt+ jaw thrust+ mouth opening

Patient Positioning

Sniffing position

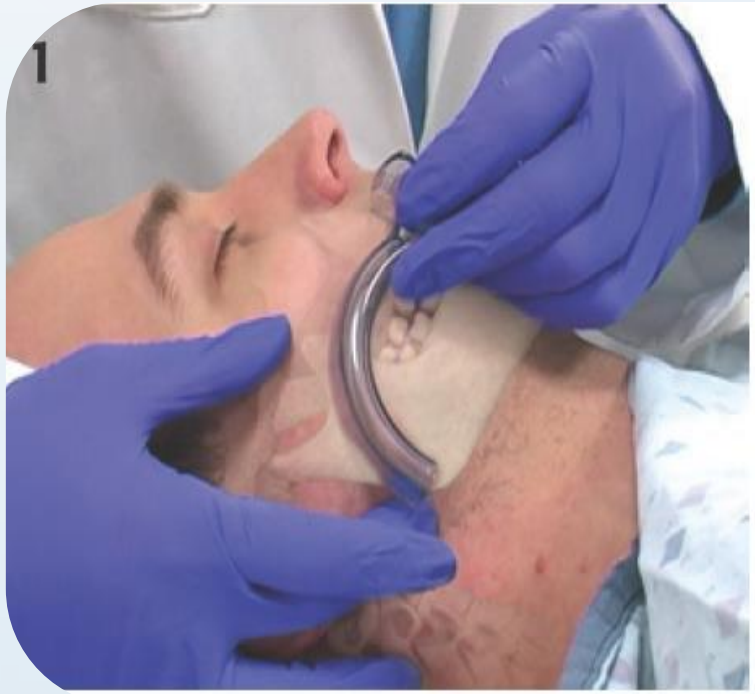
The neck is flexed relative to the torso and with atlanto-occipital extension



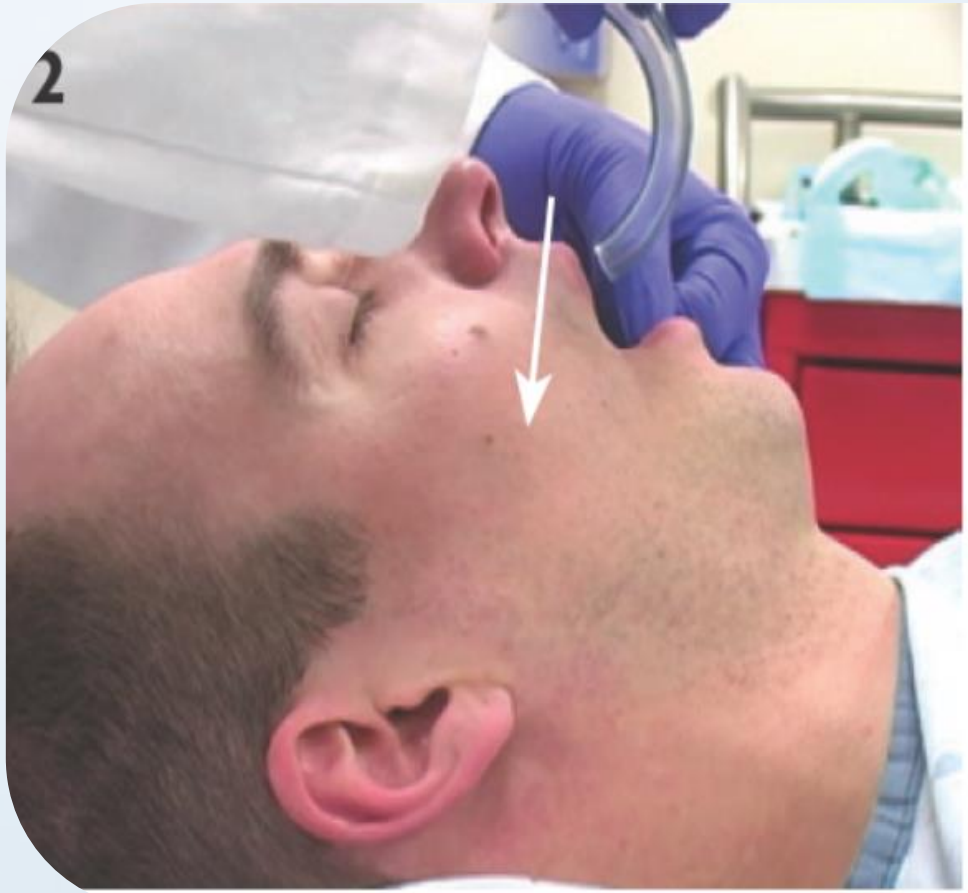
The best position for opening the upper airway in morbidly obese patients is **elevation of the head, neck, and shoulders so that the external auditory meatus is aligned with the sternum**

Oropharyngeal Airway Insertion Equipment

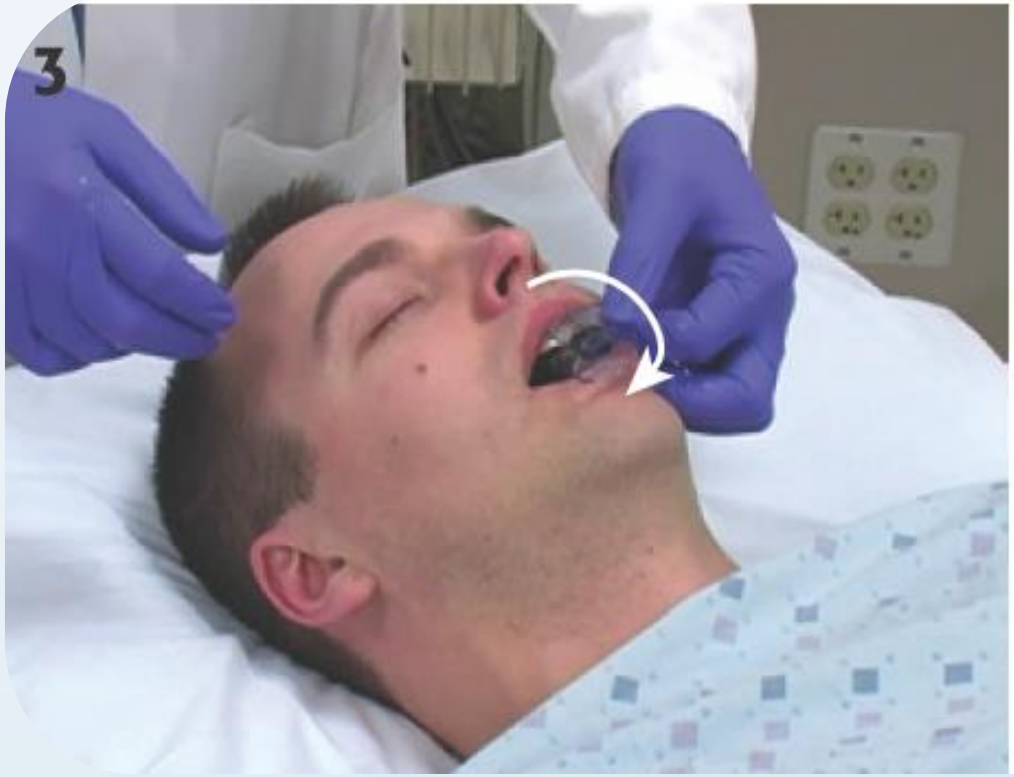
Oropharyngeal Airway Insertion



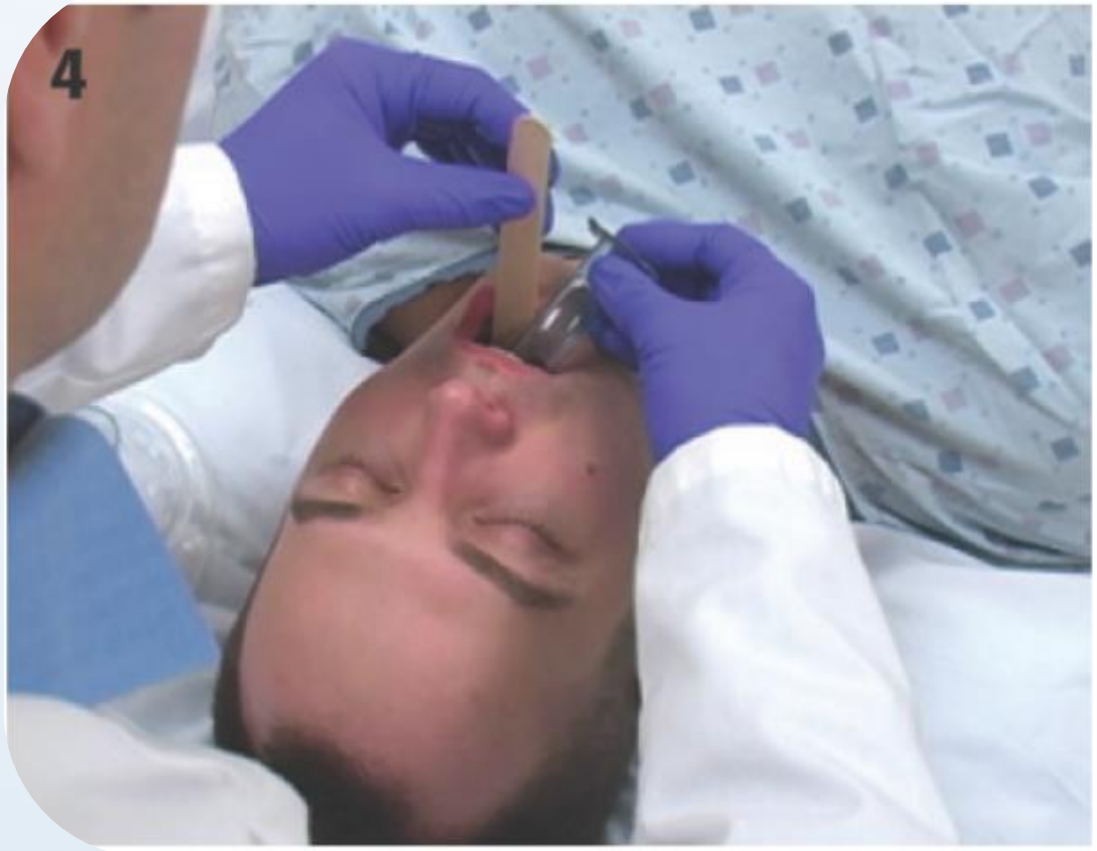
For oropharyngeal airway insertion, first measure. An airway of correct size will extend from the corner of the mouth to the earlobe or the angle of the mandible.



Open the patient's mouth with your thumb and index finger, then insert the airway in an inverted position along the patient's hard palate.



When the airway is well into the mouth, rotate it 180°, with the distal end of the airway lying in the hypopharynx. It may help to pull the jaw forward during passage.



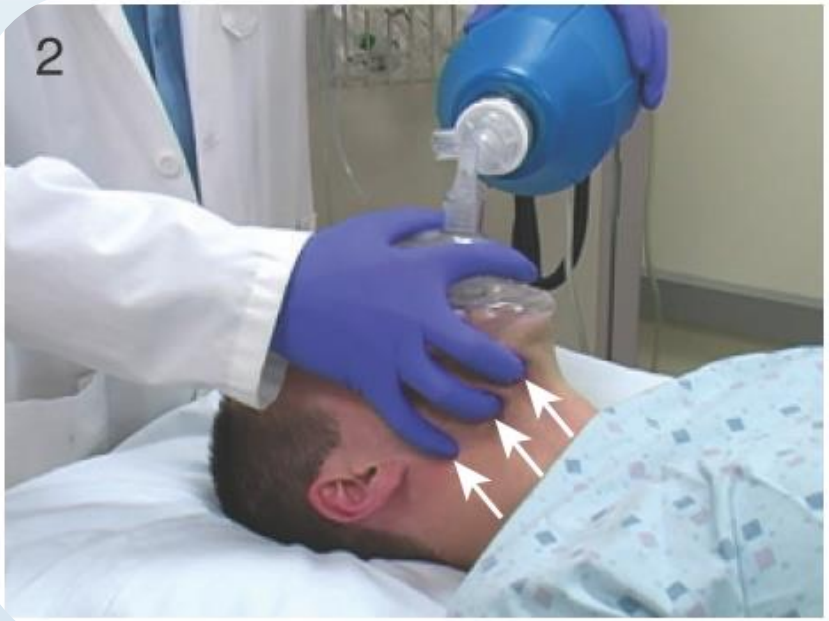
Alternatively, open the mouth widely and use a tongue blade to displace the tongue inferiorly, and advance the airway into the oropharynx. No rotation is required with this method.

Bag Mask Ventilation

One-handed technique

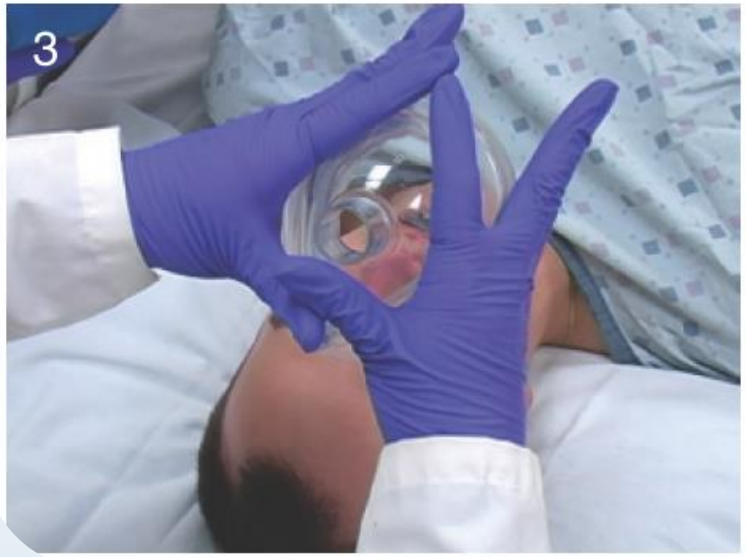
The “C-E” clamp technique provides the most effective seal.

Use your thumb and index finger to form a letter “C” and provide anterior pressure on the mask.



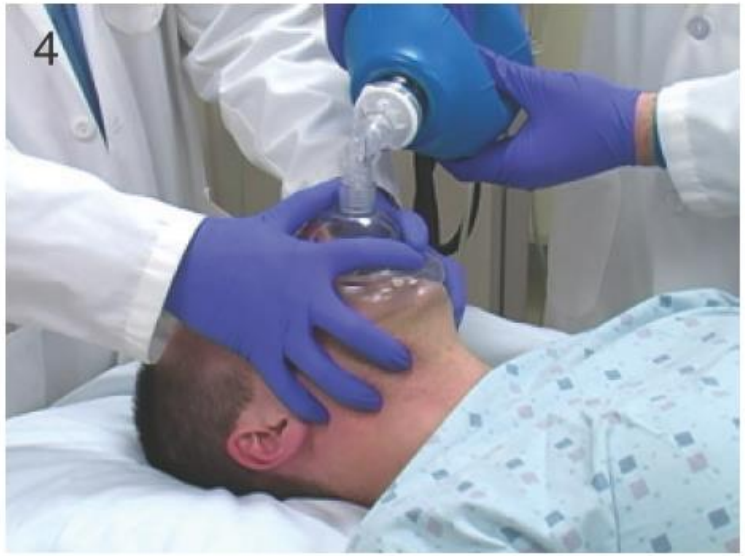
Use your third, fourth, and fifth fingers to lift the mandible up into the mask. It may be possible to place the fifth finger behind the mandible and perform a jaw thrust.

Two-handed technique

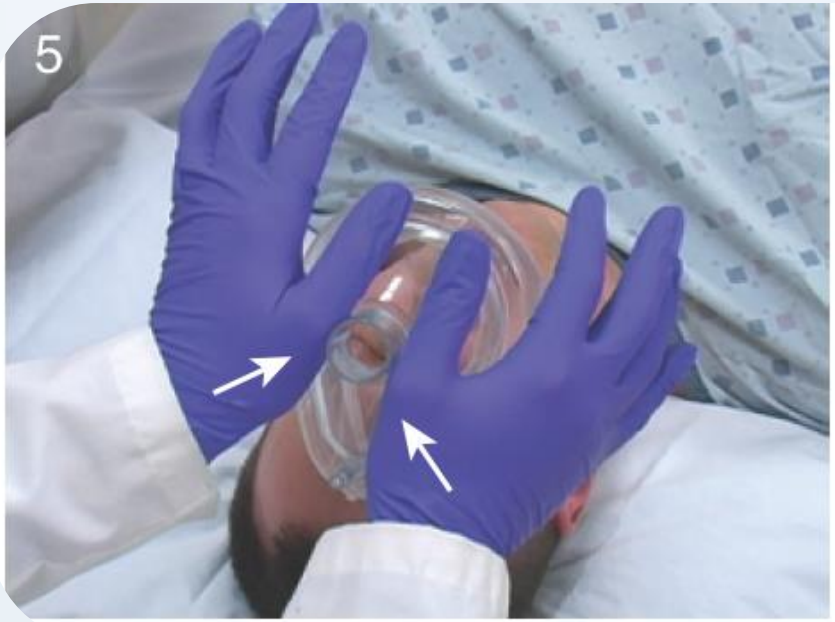


The traditional technique is the “double C-E” method.

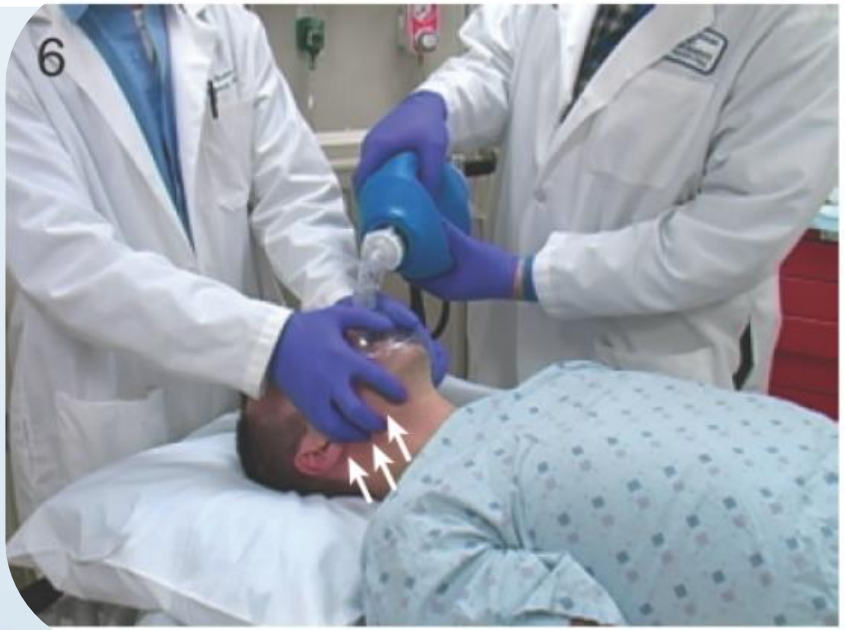
Use the thumb and index fingers of both hands to encircle the top of the mask.



Use the third, fourth, and fifth fingers of each hand to lift both sides of the mandible to meet the mask. It is difficult to do a good jaw lift with this method.



A better two-handed method is to hold the mask in place with the thenar eminences of both hands.



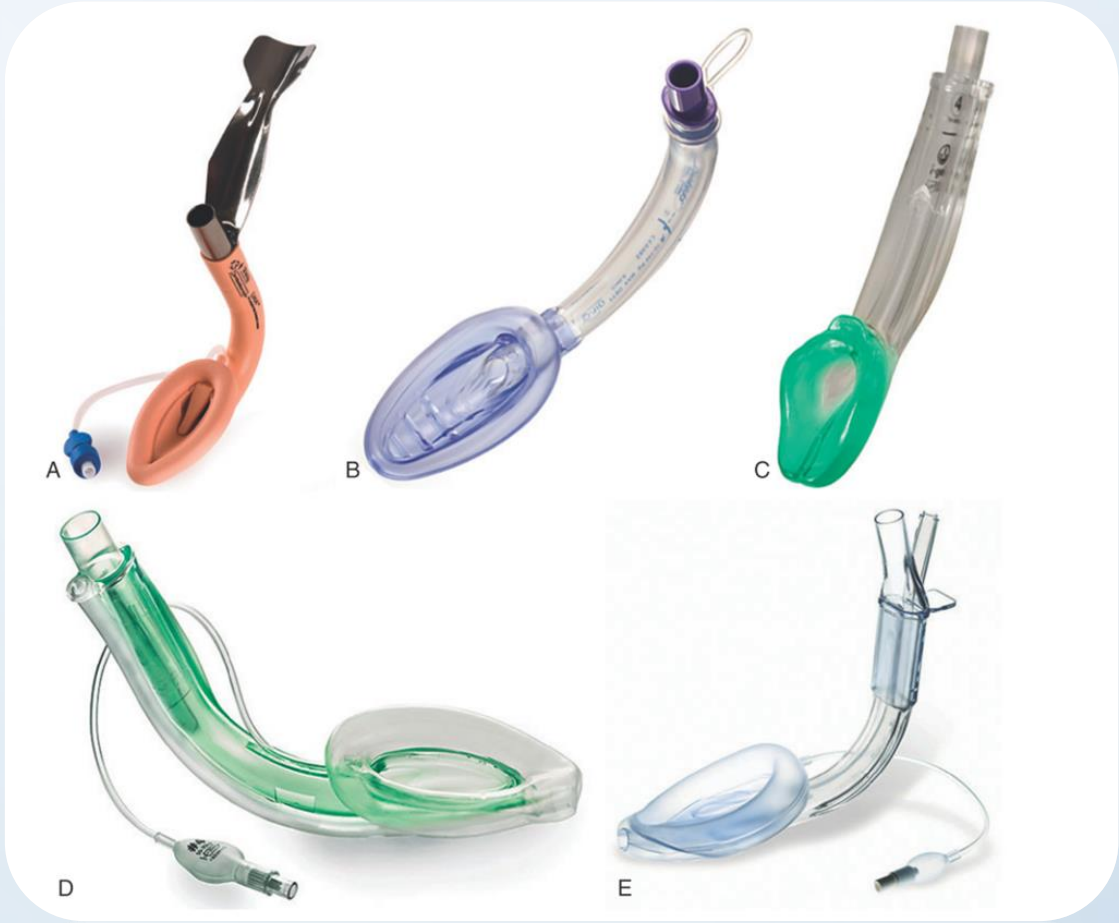
Use the long fingers under the mandible to do a jaw lift while also pressing the mask firmly against the face. This allows the operator to do a good jaw lift and create a good seal with the strongest muscles of the hands.

Advanced airway

- Endotracheal Intubation

- Supraglottic advanced airway

Supraglottic advanced airway



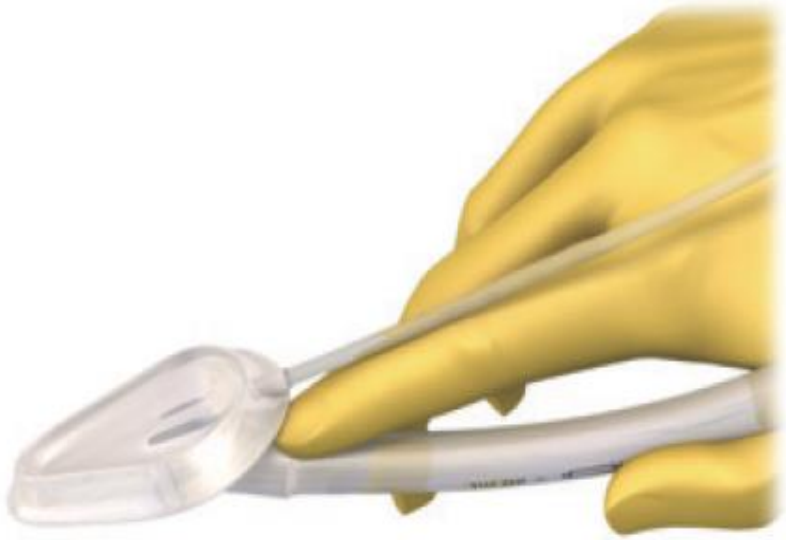
1

After selecting the appropriate size LMA, completely deflate the cuff while pushing it posteriorly so that it forms a smooth wedge shape without any wrinkles.

2

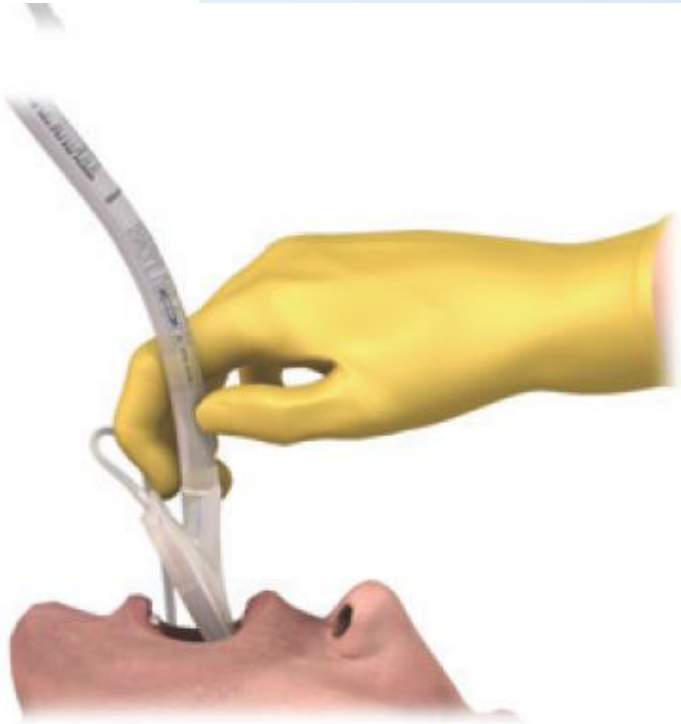
Place a small amount of water-soluble lubricant onto the posterior surface of the LMA just before insertion.

3



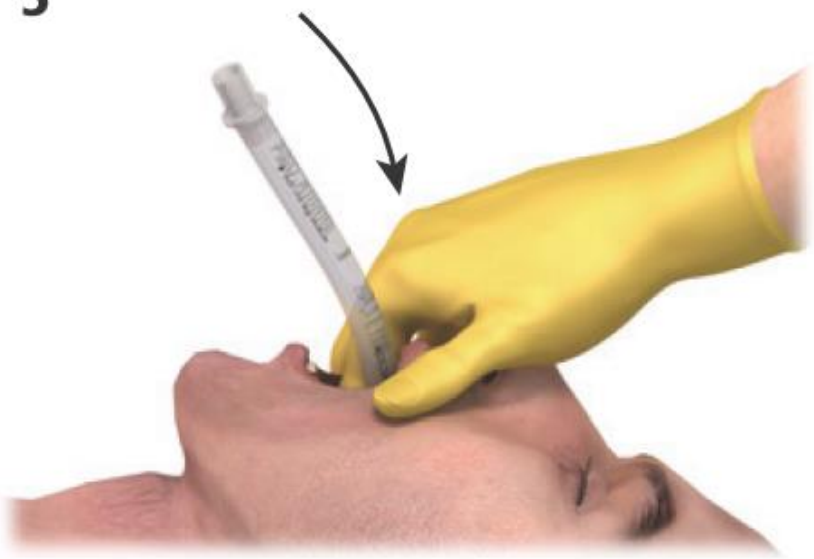
Hold the LMA like a pen, with the index finger at the junction of the airway tube and the cuff.

4



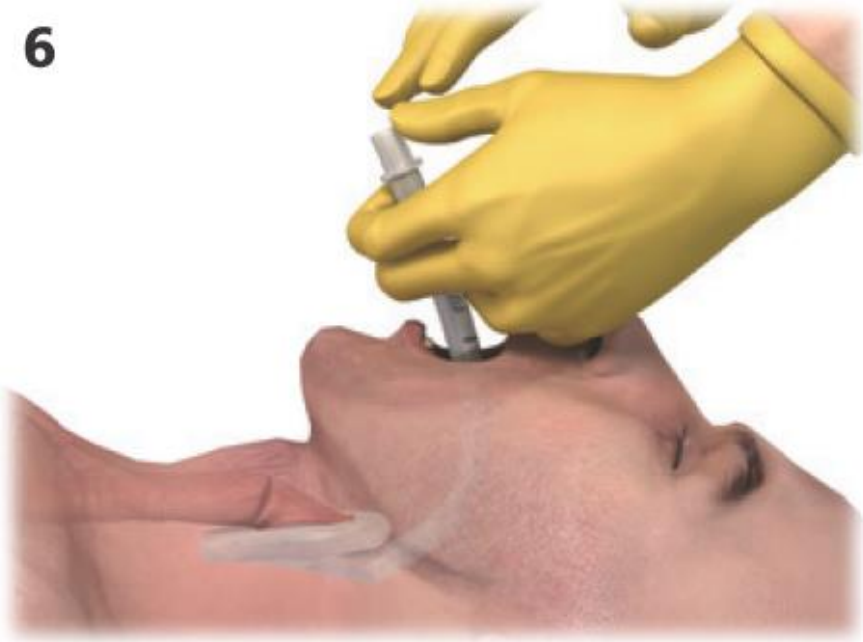
Insert the LMA with the posterior tip pressed against the hard palate and into the oropharynx.

5



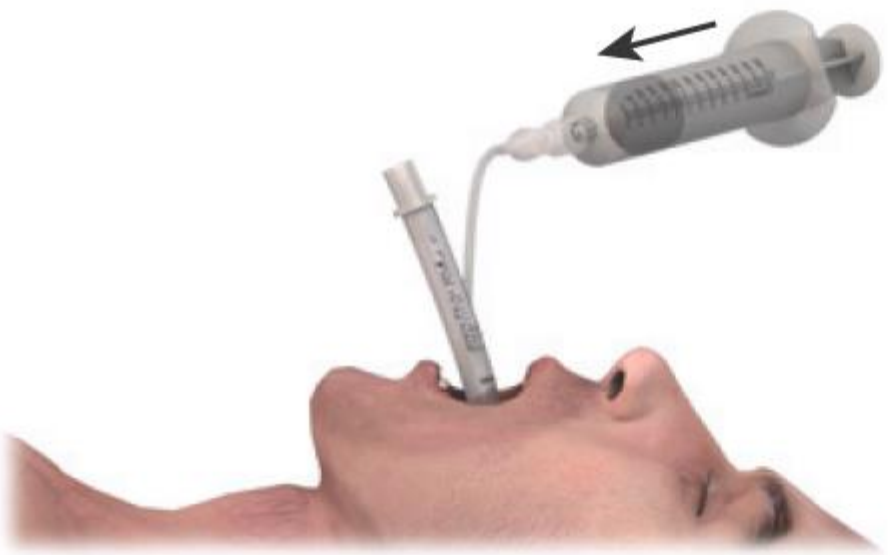
Advance the LMA further by extending the index finger and pushing the posterior cuff along the soft palate and posterior pharynx. Exert counterpressure on the occiput during insertion.

6



When resistance is felt, carefully remove the index finger while holding the proximal end of the tube with the other hand.

7

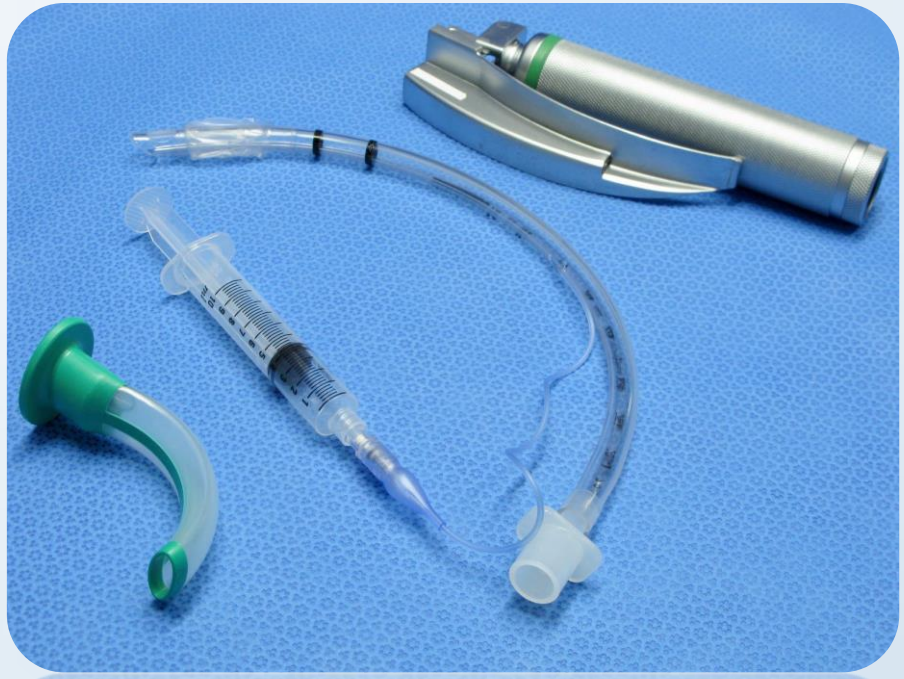


Let go of the airway tube and inflate the cuff with enough air to achieve a good seal. This may require only half of the maximum cuff volume. *Do not overinflate the cuff!*

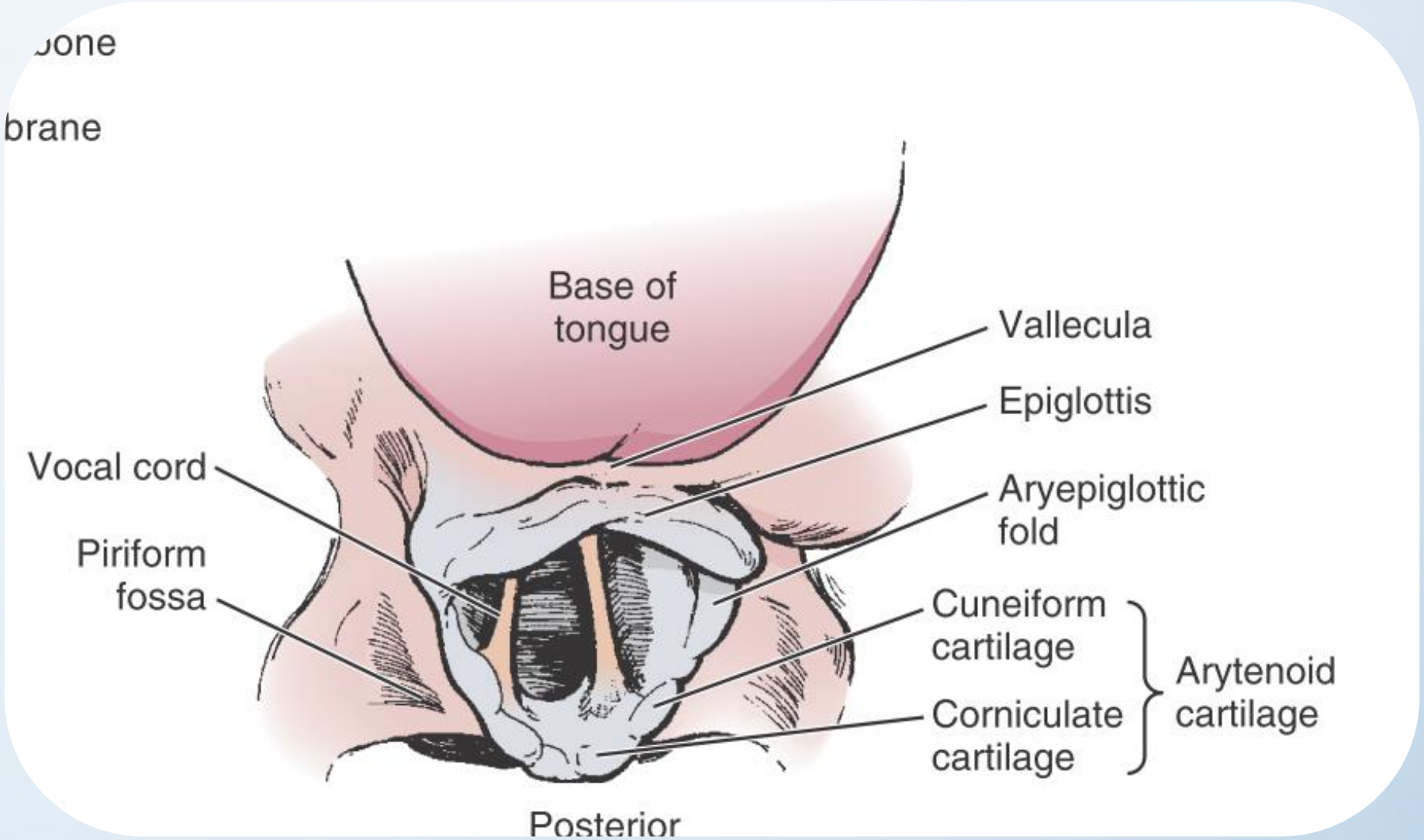
8

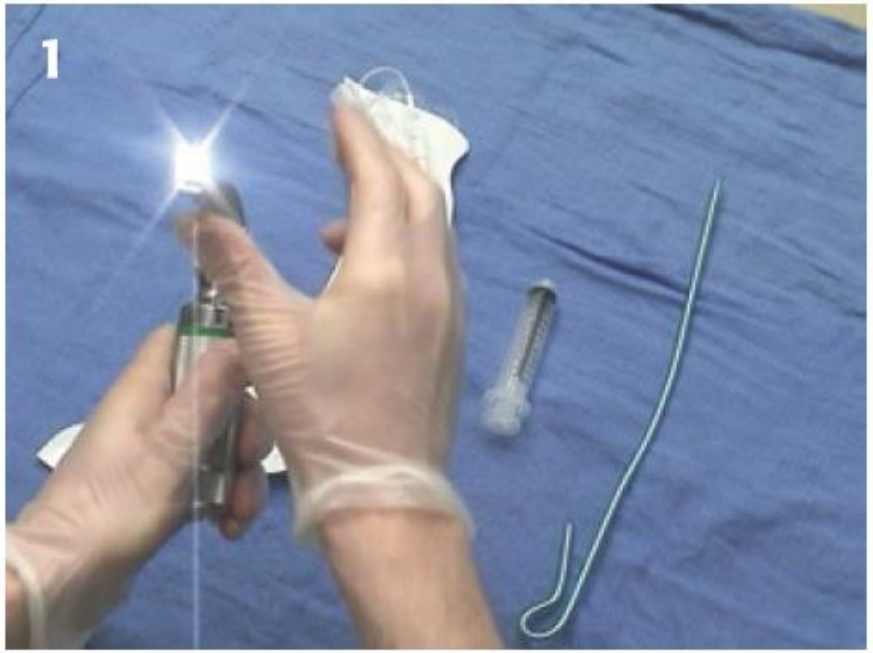
Attach a bag and ventilate while using chest rise, breath sounds, and capnography to confirm adequate gas exchange.

Endotracheal Intubation



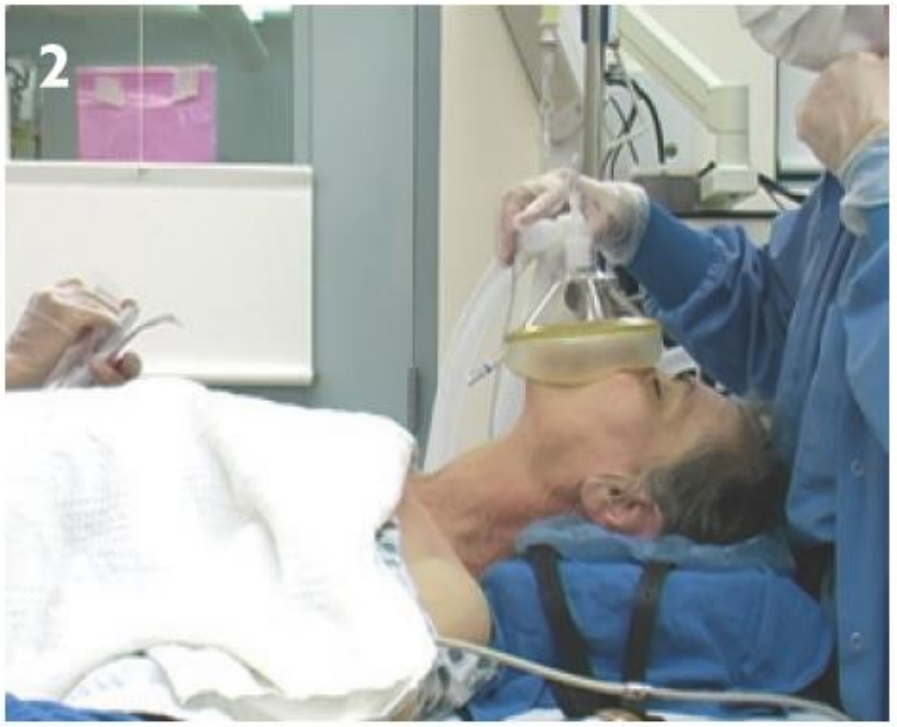

I.D 7.0
ORAL/NASAL USE ONCE
119
121
123
125
127cm
I.D 7.5
ORAL/NASAL USE ONCE
119
121
123
125
127cm


Base of tongue
Vallecula
Epiglottis
Aryepiglottic fold
Vocal cord
Piriform fossa
Cuneiform cartilage
Corniculate cartilage
Arytenoid cartilage
Posterior

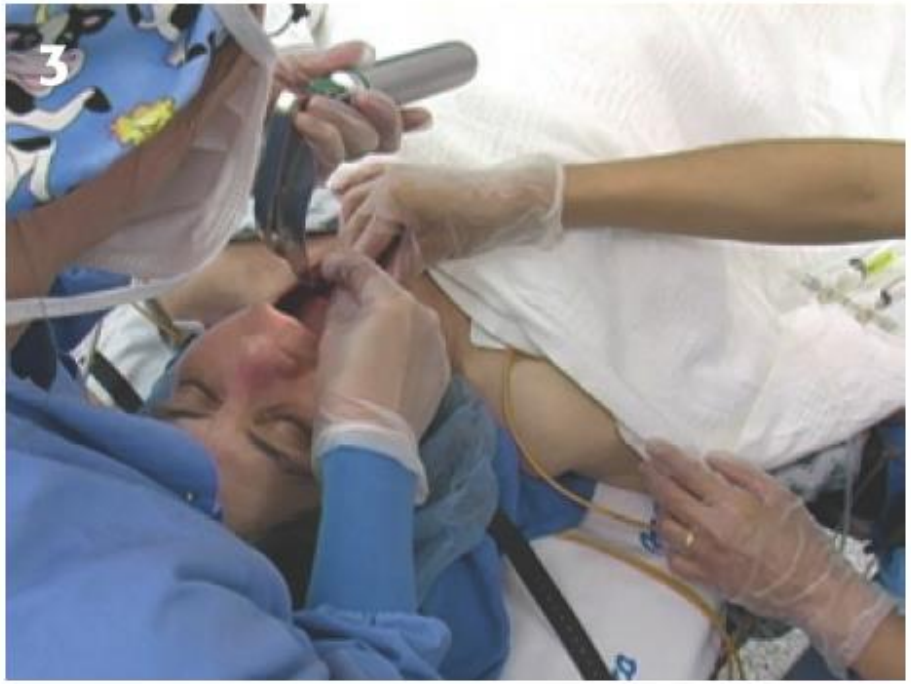


Check all equipment, including the light on the laryngoscope and the cuff on the endotracheal tube.

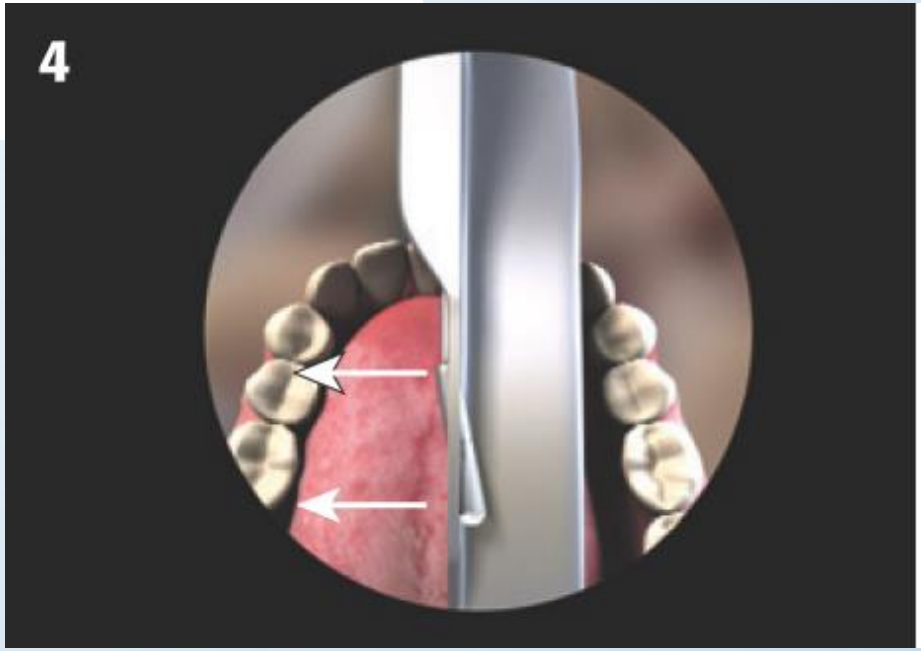
Ensure that suction and difficult airway devices are within reach.



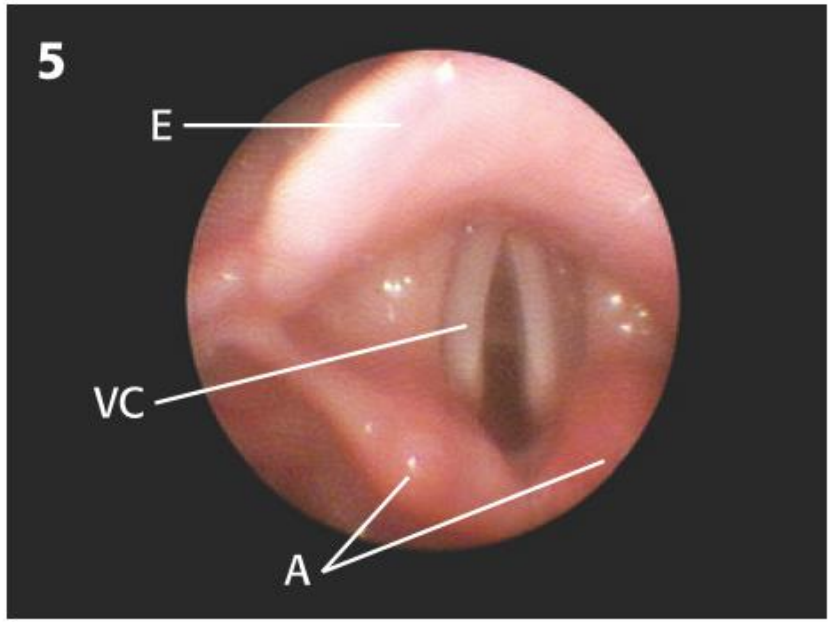
Place patient in the sniffing position, elevate the bed so that the patient's head is at the level of the lower part of your sternum, and preoxygenate.



Hold laryngoscope with your left hand. Open patient's mouth with your right hand and introduce the laryngoscope into the right side of the patient's mouth.

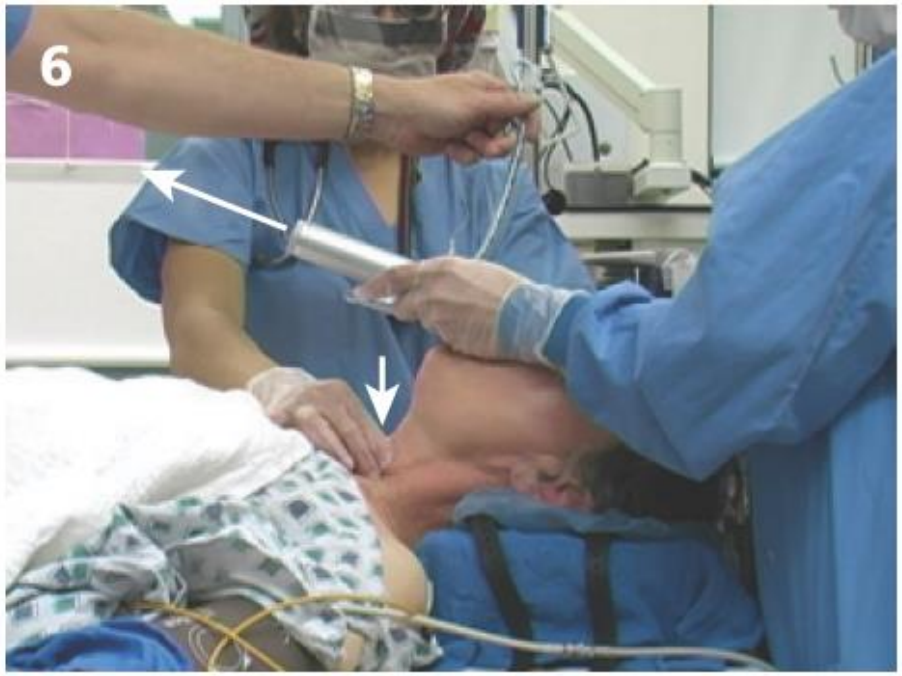


Push the tongue to the left side of the mouth, slowly advance the blade, and progressively identify the base of the tongue, the epiglottis, and the posterior cartilages.



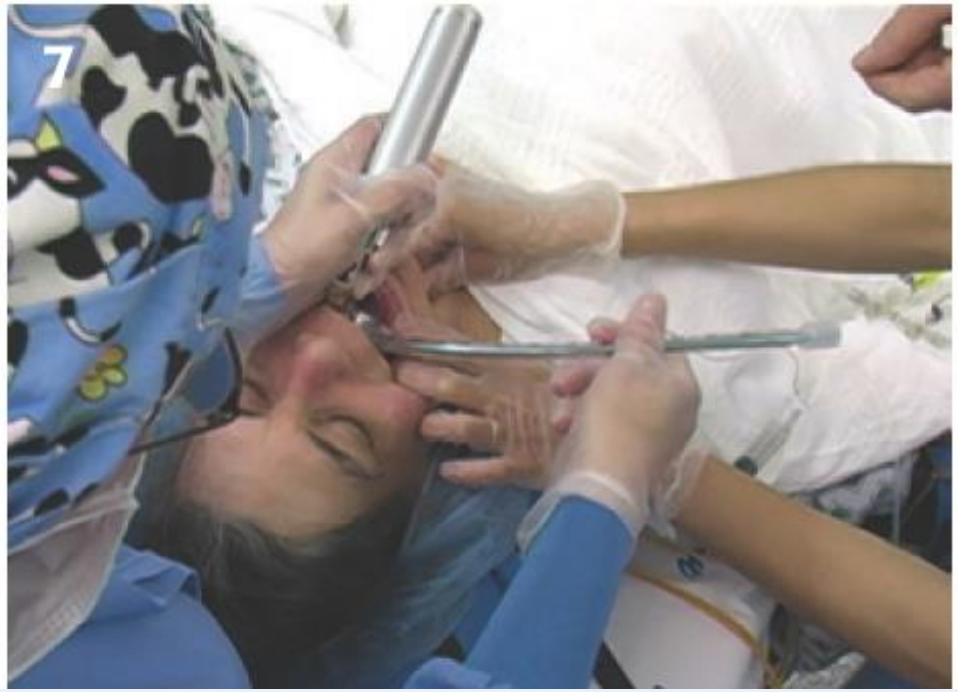
Place the Macintosh blade in the vallecula, or the Miller blade under the epiglottis (E), and visualize the vocal cords (VC) and arytenoid cartilages (A).

Do not take your eyes off of the cords once they are identified.

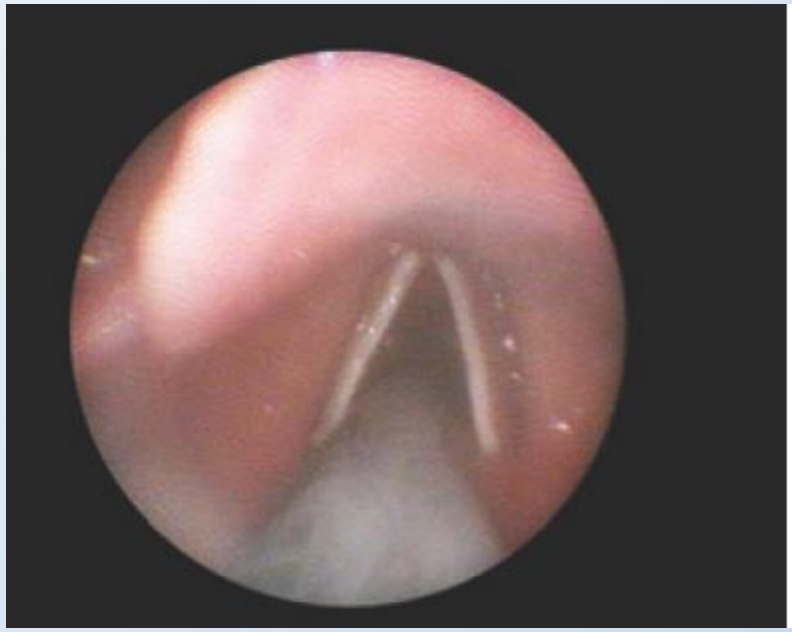


Lift in the direction of the laryngoscope handle.

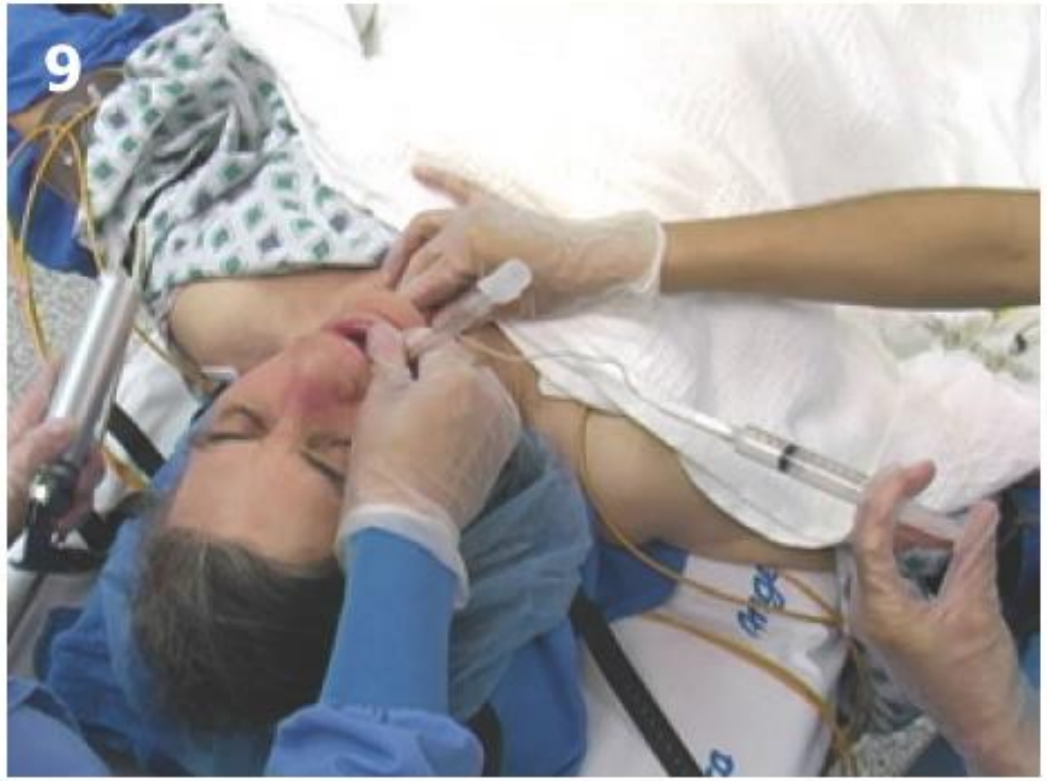
Manipulate the thyroid cartilage to achieve optimal laryngeal exposure. Have an assistant maintain that position during intubation.



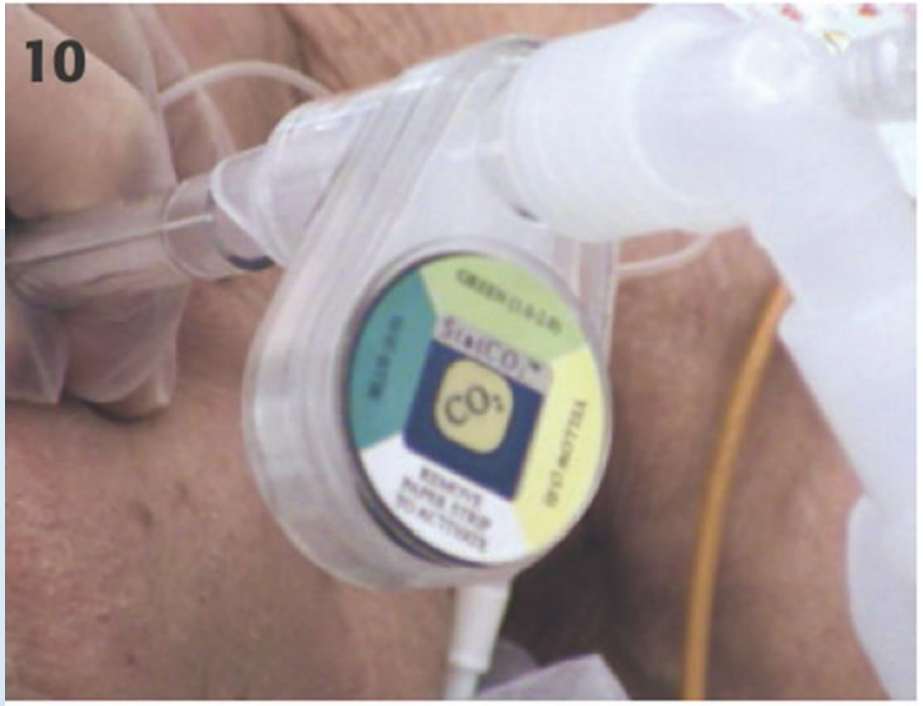
Instruct an assistant to retract the right cheek for better visualization. Pass the tube on the right side of the patient's mouth. *Do not allow the tube to obstruct your view of the vocal cords during advancement.*



Under direct visualization, pass the tube 3–4 cm beyond the vocal cords.



Remove the stylet and inflate the pilot balloon.



Confirm proper placement with end-tidal CO_2 detection, auscultation, and a chest radiograph.