

AIRWAY MANAGEMENT



First priority is establishment or maintenance of airway patency

1. Talk to the patient

A patient who can speak clearly must have a clear airway. Airway obstruction by the tongue in the unconscious patient is often a problem. The unconscious patient may require assistance with airway and/or ventilation. If you suspect a head, neck or chest injury, protect the cervical spine during endotracheal intubation.

2. Give oxygen

Give oxygen, if available, via self-inflating bag or mask.

3. Assess the airway. Signs of airway obstruction include:

- Snoring or gurgling
- Stridor or abnormal breath sounds
- Agitation (hypoxia)
- Using the accessory muscles of ventilation/paradoxical chest movements
- Cyanosis

Be alert for foreign bodies. Intravenous sedation is **absolutely** contraindicated in this situation.

4. Consider the need for advanced airway management

5. Indications for advanced airway management techniques include:

- Persisting airway obstruction
- Penetrating neck trauma with hematoma (expanding)
- Apnea
- Hypoxia
- Severe head injury
- Chest trauma
- Maxillofacial injury

Airway obstruction requires *urgent* treatment

SURGICAL CRICOTHYROIDOTOMY

Surgical cricothyroidotomy should be conducted in any patient where intubation has been attempted twice and failed and/or the patient cannot be ventilated.

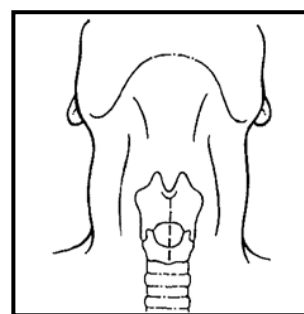
TECHNIQUE

1. Hyperextend the neck, making the patient comfortable

2. Identify the groove between the cricoid and thyroid cartilages just below the “Adam’s apple” (protruding thyroid)

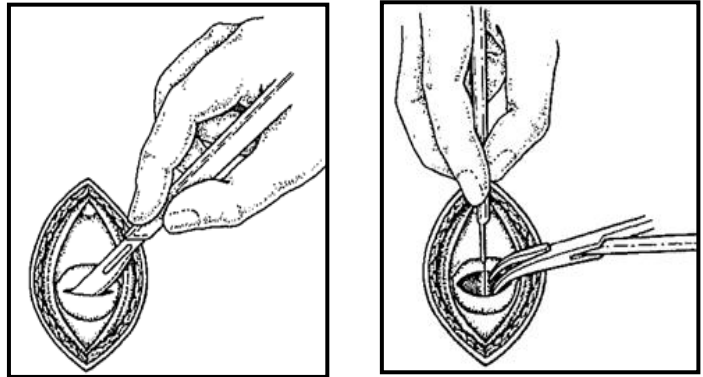
3. Clean the area and infiltrate with local anesthetic

4. Incise through the skin vertically with a 1.5 cm cut and use blunt dissection to ensure that you can see the membrane between the thyroid and cricoid

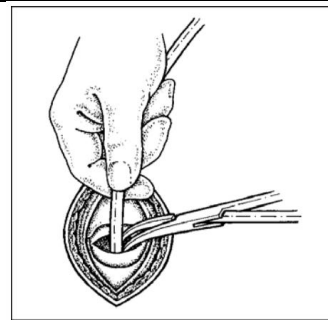


5. With a #22 or #23 scalpel blade, stab through the membrane into the hollow trachea

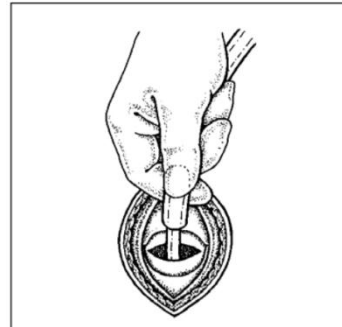
6. Rotate the blade 90°, insert a curved artery forceps alongside the blade, remove the blade and open the forceps side to side, widening the space between the thyroid and cricoid cartilages



7. Pass a thin introducer or a nasogastric tube into the trachea if very small access or proceed to step 9



8. Run a 4-6 endotracheal tube over the introducer and pass it into the trachea



9. Remove the introducer, if used

- This tube can stay in place for up to 3 days. Do not attempt this procedure in a child under the age of 10 years; passing several needles through the membrane will give enough air entry.
- This procedure should be performed by an experienced person, with prior knowledge of the anatomy and medical condition of the patient.
- This procedure should not be undertaken lightly, as wrong placement, bleeding and delay can cause death.