

## CRICOTHYROIDOTOMY

### Introduction:

- Recommended procedure when an emergency surgical airway is required
- Percutaneous tracheostomy *is not* an emergency procedure
- Always call for help and skilled assistance

### Indication:

- Can't intubate, Can't ventilate situation

### Anatomy:

- Cricothyroid membrane: superiorly bound by thyroid cartilage, inferiorly by cricoid cartilage. The cricothyroid arteries run at the apical portion of the cricothyroid membrane.
- Cricothyroidotomy should be attempted in the central and lower portion of the membrane

### Classification:

- Surgical cricothyroidotomy
- Needle cricothyroidotomy (by commercially available set)

### Equipment

- Scalpel and handle, and a size 6.0 cuffed endotracheal tube
- Our unit uses commercial dilational cricothyroidotomy set
- Oxygen delivery circuit – self-inflating manual resuscitator bag

### Procedure

- Palpate the cricothyroid membrane
- 2cm horizontal incision through skin and membrane
- Insert blade handle into wound and turn vertically to enlarge wound
- Insert endotracheal tube directly into trachea
- Connect oxygen circuit
- Confirm correct placement with end-tidal CO<sub>2</sub>, auscultation and check CXR
- Perform catheter suction as soon as possible after adequate oxygenation
- Cricothyroidotomy is a temporary airway: arrange a definitive surgical airway (ENT surgeons) as soon as possible

- For commercial dilational cricothyroidotomy, it is done by Seldinger's technique. Please refer to [http://www.aic.cuhk.cuhk.edu.hk/web8/dilational\\_cricothyrotomy.htm](http://www.aic.cuhk.cuhk.edu.hk/web8/dilational_cricothyrotomy.htm)