

Failed intubation, increasing hypoxaemia and difficult ventilation in the paralysed anaesthetised patient: Rescue techniques for the "can't intubate, can't ventilate" situation

failed intubation and difficult ventilation (other than laryngospasm)

Face mask  
Oxygenate and Ventilate patient  
Maximum head extension  
Maximum jaw thrust  
Assistance with mask seal  
Oral ± 6mm nasal airway  
Reduce cricoid force - if necessary

failed oxygenation with face mask (e.g. SpO<sub>2</sub> < 90% with FiO<sub>2</sub> 1.0)

**call for help**

LMA™ Oxygenate and ventilate patient  
Maximum 2 attempts at insertion  
Reduce any cricoid force during insertion

succeed

Oxygenation satisfactory and stable: Maintain oxygenation and awaken patient

"can't intubate, can't ventilate" situation with increasing hypoxaemia

**Plan D: Rescue techniques for "can't intubate, can't ventilate" situation**

or

**Cannula cricothyroidotomy**

Equipment: Kink-resistant cannula, e.g. Patil (Cook) or Ravussin (VBM)  
High-pressure ventilation system, e.g. Manujet III (VBM)

**Technique:**

1. Insert cannula through cricothyroid membrane
2. Maintain position of cannula - assistant's hand
3. Confirm tracheal position by air aspiration - 20ml syringe
4. Attach ventilation system to cannula
5. Commence cautious ventilation
6. Confirm ventilation of lungs, and exhalation through upper airway
7. If ventilation fails, or surgical emphysema or any other complication develops - convert immediately to surgical cricothyroidotomy

fail

**Surgical cricothyroidotomy**

Equipment: Scalpel - short and rounded (no. 20 or Minitrach scalpel)  
Small (e.g. 6 or 7 mm) cuffed tracheal or tracheostomy tube

**4-step Technique:**

1. Identify cricothyroid membrane
2. Stab incision through skin and membrane  
Enlarge incision with blunt dissection (e.g. scalpel handle, forceps or dilator)
3. Caudal traction on cricoid cartilage with tracheal hook
4. Insert tube and inflate cuff  
Ventilate with low-pressure source  
Verify tube position and pulmonary ventilation

**Notes:**

1. These techniques can have serious complications - use only in life-threatening situations
2. Convert to definitive airway as soon as possible
3. Postoperative management - see other difficult airway guidelines and flow-charts
4. 4mm cannula with low-pressure ventilation may be successful in patient breathing spontaneously

