

Prepare the patient

- Reliable IV / IO access**
- Optimise position**
 - Sit-up?
 - Mattress hard
- Airway assessment**
 - Identify cricothyroid membrane
 - Awake intubation option?
- Optimal preoxygenation**
 - 3 mins or $ETO_2 > 85\%$
 - Consider CPAP / NIV
 - Nasal O_2
- Optimise patient state**
 - Fluid / pressor/ inotrope
 - Aspirate NG tube
 - Delayed sequence induction
- Allergies?**
 - ↑ Potassium risk?
- avoid suxamethonium

Prepare the equipment

- Apply monitors**
 - SpO_2 / waveform $ETCO_2$ / ECG / BP
- Check equipment**
 - Tracheal tubes x 2
- cuffs checked
 - Direct laryngoscopes x 2
 - Videolaryngoscope
 - Bougie / stylet
 - Working suction
 - Supraglottic airways
 - Guedel / nasal airways
 - Flexible scope / Aintree
 - FONA set
- Check drugs**
 - Consider ketamine
 - Relaxant
 - Pressor / inotrope
 - Maintenance sedation

Prepare the team

- Allocate roles**
One person may have more than one role.
 - Team Leader
 - 1st Intubator
 - 2nd Intubator
 - Cricoid force
 - Intubator's assistant
 - Drugs
 - Monitoring patient
 - Runner
 - MILS (if indicated)
 - Who will perform FONA?
- Who do we call for help?**
- Who is noting the time?**

Prepare for difficulty

- Can we wake the patient if intubation fails?**
- Verbalise "Airway Plan is:"**
 - Plan A:**
Drugs & laryngoscopy
 - Plan B/C:**
Supraglottic airway
Face-mask
Fibreoptic intubation via supraglottic airway
 - Plan D:**
FONA
Scalpel-bougie-tube
- Does anyone have questions or concerns?**

Can't Intubate, Can't Oxygenate (CICO) in critically ill adults



The Faculty of
Intensive Care Medicine



CALL FOR HELP



Declare "Can't Intubate, Can't Oxygenate"

Plan D: Front Of Neck Airway: FONA

- Extend neck
- Ensure neuromuscular blockade
- Continue rescue oxygenation
- Exclude oxygen failure and blocked circuit

Scalpel cricothyroidotomy

- Equipment:**
1. Scalpel (wide blade e.g. number 10 or 20)
 2. Bougie (≤ 14 French gauge)
 3. Tube (cuffed 5.0-6.0mm ID)

Laryngeal handshake to identify cricothyroid membrane

Palpable cricothyroid membrane

- Transverse stab incision through cricothyroid membrane
- Turn blade through 90° (sharp edge towards the feet)
- Slide Coudé tip of bougie along blade into trachea
- Railroad lubricated cuffed tube into trachea
- Inflate cuff, ventilate and confirm position with capnography
- Secure tube

Impalpable cricothyroid membrane

- Make a large midline vertical incision
- Blunt dissection with fingers to separate tissues
- Identify and stabilise the larynx
- Proceed with technique for palpable cricothyroid membrane as above

Trained expert only

Other FONA techniques

- Non-scalpel cricothyroidotomy
- Percutaneous tracheostomy
- Surgical tracheostomy

Post-FONA care and follow up

- Tracheal suction
- Recruitment manoeuvre (if haemodynamically stable)
- Chest X-ray
- Monitor for complications
- Surgical review of FONA site
- Agree airway plan with senior clinicians
- Document and complete airway alert

Tracheal intubation of critically ill adults



The Faculty of Intensive Care Medicine



Pre-oxygenate and Checklist

Position: head up if possible
 Assess airway and identify cricothyroid membrane
 Waveform capnograph
 Pre-oxygenate: facemask / CPAP / NIV / nasal O₂
 Optimise cardiovascular system
 Share plan for failure

Note the time

Plan A: Tracheal Intubation

Laryngoscopy

Maximum 3 attempts

Maintain oxygenation

- Continuous nasal oxygenation
- Facemask ventilation between attempts

Neuromuscular block

Video or direct laryngoscopy +/- bougie or stylet
 External laryngeal manipulation
 Remove cricoid

Succeed

Confirm with capnography

First failure

Call HELP

- Video laryngoscopy
- Get Front Of Neck Airway (FONA) set

Fail

Declare "failed intubation"

Plan B/C: Rescue Oxygenation

2nd generation supraglottic airway

Facemask
 • 2 person
 • adjuncts

Maximum 3 attempts each

Change device / size / operator
 Open Front Of Neck Airway set

Succeed

Stop, think, communicate

Options

- Wake patient if planned
- Wait for expert
- Intubate via supraglottic airway x1
- Front Of Neck Airway

Fail

Declare "can't intubate, can't oxygenate"

Plan D: Front Of Neck Airway: FONA

Use FONA set Scalpel cricothyroidotomy

Extend neck
 Neuromuscular blockade
 Continue rescue oxygenation

Trained expert only

Other FONA techniques

Non-scalpel cricothyroidotomy
 Percutaneous tracheostomy
 Surgical tracheostomy

EXPERT: one extra attempt if appropriate

Video / direct laryngoscopy
 Facemask or supraglottic airway
 Front Of Neck Airway