

Can't Intubate, Can't Oxygenate

We In Are Trouble But Don't Panic!!!

The "Can't Intubate, Can't Oxygenate" (CICO) scenario is a rare event with an estimated incidence of approximately 1:10000-1:50000 anaesthetics but may be more frequent in other specialties such as ICU or ED due to the patient case mix (*NAP4 Sec2 Ch13*). Although CICO is 'rare' over half of experienced anaesthetists report encountering this demanding scenario at least once in their career. It is therefore crucial to be as prepared as possible for such an eventuality.

In this teaching we are assuming that all supraglottic options have been attempted and failed. No patient should conceivably undergo attempts at emergency oxygenation through the anterior neck without having considered attempts at oxygenation through bag and mask ventilation, LMA insertion and attempts at intubation. NAP4: 60% CICO cases had NO attempt made at a SAD.

DAS Guidelines assume a **paralysed** patient. If unparalysed, consider laryngospasm and treat accordingly, consider if the patient can be woken up, giving a muscle relaxant at this point may enable ventilation and will possibly make surgical airway attempts easier.

Clear communication is a vital part of successful CICO procedure, both in communicating to the theatre team that a CICO event has arisen, and in achieving the correct series of steps necessary for a good outcome.

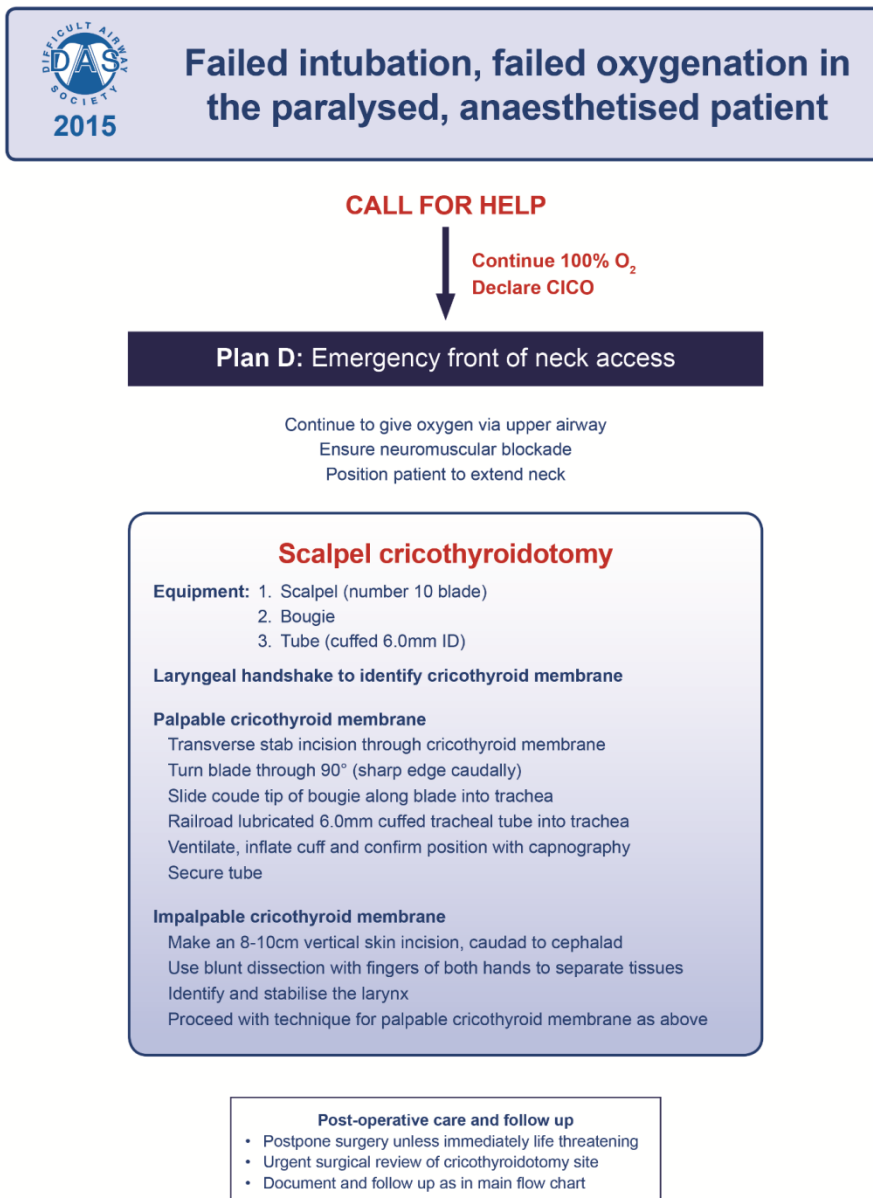
Needle Cricothyroidotomy has been removed from the current guidelines (Nov 2015)
The important factor is the decision-making process and the communication.

Complications

- Malposition
- False passage
- Haemorrhage
- Oesophageal perforation
- Surgical emphysema
- Barotrauma / pneumothorax

Surgical technique.

This enables placement of a size 6.0 and conventional ventilation.



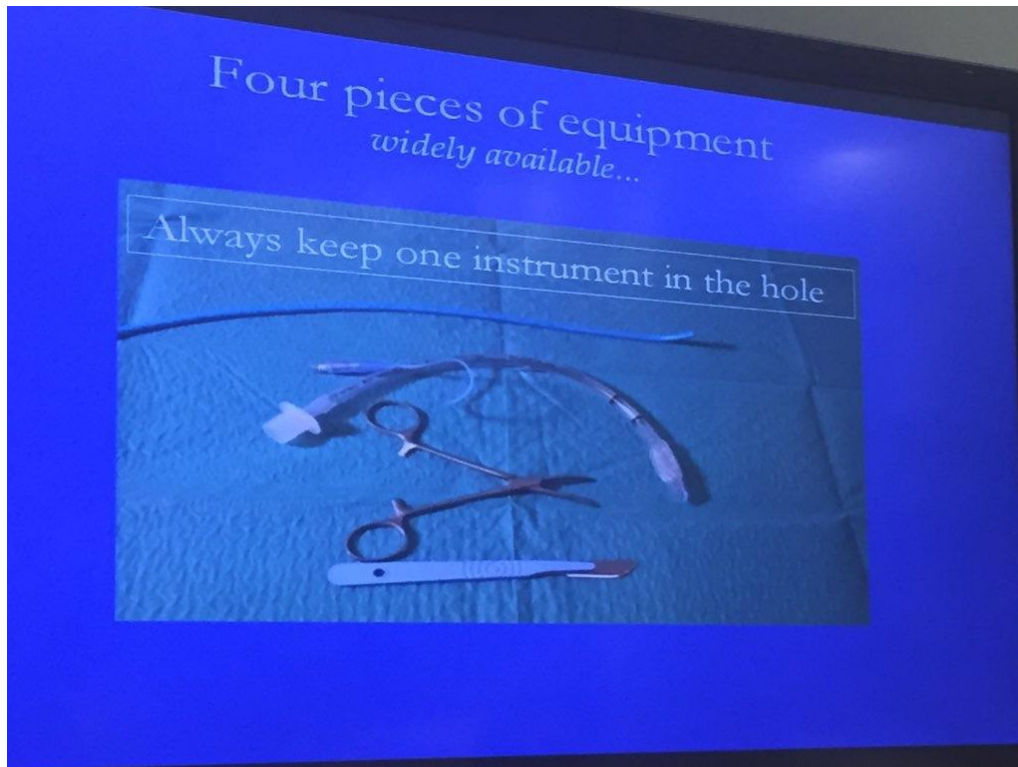
This flowchart forms part of the DAS Guidelines for unanticipated difficult intubation in adults 2015 and should be used in conjunction with the text.

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Adapted by Dr A Norman March 2016

There is some sage advice from our colleagues at St George's in Tooting:

(Thank you to Sally Millett for obtaining)

1. Stay in the midline
2. keep your eyes on the hole
3. Once in the hole, always in the hole
4. Don't let go of the tube



The Combined Seldinger And Surgical Cricothyroidotomy Kit



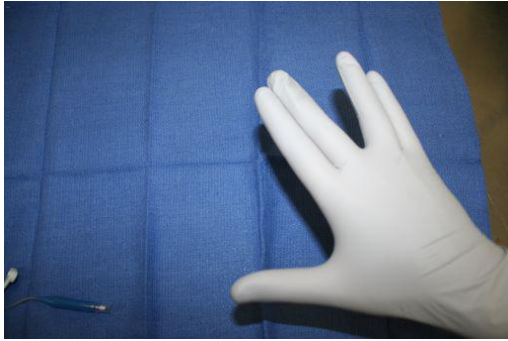
Large cannula technique

Seldinger techniques - Melker™

This technique is not described in the current DAS Guidelines but is included here due to the availability of the kit up to press.

1. Prepare patient as above and infiltrate with local anaesthetic in the elective situation.
2. Perform a cannula cricothyroidotomy with the cannula provided in the kit.
3. Insert the guidewire.
4. Make a horizontal skin incision.
5. Insert the dilator into the cuffed ETT provided (take care to choose the dilator with the hole!) and pass over the guidewire to dilate the airway orifice. Take care to hold the dilator securely with the ETT – eg 'Vulcan' grip with 2 fingers above flange and 2 below. If the dilator slips back insertion will be more difficult/impossible.

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6. Remove dilator.
7. Attach a catheter mount and Ambu bag and ventilate.
8. Observe chest movement and auscultate breath sounds to confirm adequate ventilation.
9. Check the neck to exclude swelling from the delivery of gas into the tissues rather than the trachea.