

Queensland Paediatric Airway Management Algorithm

Guides					
Age	Cuffed ETT Size	ETT Depth	LMA	Laryngoscope	NGT size
0	3 3.5	10 12			6-8
1			1	1	8
2	4	13			
3					
4	4.5	14			10
5			2	2	
6	5	15			
7					10-12
8	5.5	16			
9			3		12
10	6	18			
11					
12			4		
13	6.5	19			12-14
14	Adult Sizes				
15					
16					

1 Optimise:

• Patient Location	- Resus, OT - Call for help - ED Consultant / anaesthetics / critical care
• Respiratory function	- Airway open, 20 degree head up, consider NGT - High flow nasal cannulae
• Patient position	- Ear-sternal notch, face parallel to ceiling, midline, bed height
• Pre-oxygenation	- NRBM, Consider NIV / Hi-flow / BVM / T-piece
• Haemodynamics	- Beware hypotension, consider fluid / Adrenaline
• Is difficult intubation expected?	- Anatomy - Pathology (burns, anaphylaxis, epiglottitis) - Physiology (critical illness)

2 Designate and Identify:

PEOPLE	EQUIPMENT	MONITORING	DRUGS (DEFAULT)
<input type="checkbox"/> Intubator <input type="checkbox"/> Second Intubator <input type="checkbox"/> Airway Nurse <input type="checkbox"/> Drugs <input type="checkbox"/> Scribe <input type="checkbox"/> C-spine (PRN)	<input type="checkbox"/> Self inflating bag <input type="checkbox"/> Suction <input type="checkbox"/> NPA/OPA <input type="checkbox"/> ETT + alt sizes <input type="checkbox"/> Laryngoscope x 2 <input type="checkbox"/> Bougie <input type="checkbox"/> LMA <input type="checkbox"/> Difficult Airway Kit <input type="checkbox"/> Tape+syringe	<input type="checkbox"/> Capnography <input type="checkbox"/> SpO2 <input type="checkbox"/> ECG <input type="checkbox"/> BP	<input type="checkbox"/> Induction - Ketamine 1-2 mg/kg <input type="checkbox"/> Paralysis - Rocuronium 1.2 mg/kg <input type="checkbox"/> Prepare fluid bolus, Adrenaline, Atropine

3 Run resus brief and confirm plans:

Give induction drug and continue nasal O2 (2 L/kg/minute or 15 L/minute)	- Confirm ability to BVM prior to paralysis
Give paralytic agent	
Secure and confirm airway	- Capnography, auscultate, fogging, chest movement
Post intubation cares	- Sedation, NGT, CXR, VBG, optimise haemodynamics and ventilation, documentation



Queensland Paediatric Checklist

Emergency

Queensland Paediatric Team Resus Brief and Airway Checklist

Identify team members

- ☐ Nursing team leader
- ☐ Medical team leader
- ☐ First intubator

- ☐ Airway assistant
- ☐ Second intubator
- ☐ Drugs

- ☐ Runner
- ☐ Scribe

☐

Has comprehensive monitoring been applied and working?

- SpO2
- In-circuit EtCO2
- Blood pressure (1 minute cycle)
- ECG

☐

Is the patient's position optimal?

- Needs neck inline immobilisation?
- Bed height OK?

☐

Is the patient's preoxygenation optimal?

- Apnoeic O2?
- Hi-flow?
- NIV?

☐

Confirm patency of appropriate IV / IO access

☐

Is the patient's haemodynamics optimal?

- Consider fluids / inotropes / pressors

☐

Is airway equipment available, sized and checked (go through list)?

☐

- ☐ Suction
- ☐ BVM (self inflating bag with PEEP valve and/or T-piece bag)

- ☐ Laryngoscope x 2
- ☐ ETT x 2 (+/- introducer)
- ☐ Bougie
- ☐ LMA x 2

- ☐ Adjuncts - NP x 2
- ☐ Oropharyngeal x 2
- ☐ Tube tie

- ☐ Difficult airway equipment

Have the intubation drugs and doses been confirmed?

- Drugs (induction / paralytic / pressors / others) and doses
- Sedative infusion

☐

Team leader to verbalise airway management plans

- Include difficult airway plan
- Verbalise specific anticipated complications

☐

Team resus brief complete - proceed to intubation



Emergency Intubation

USE IN CONJUNCTION WITH BASIC LIFE SUPPORT GUIDELINES. SEE RCH AIRWAY MANAGEMENT CLINICAL PRACTICE GUIDELINES.



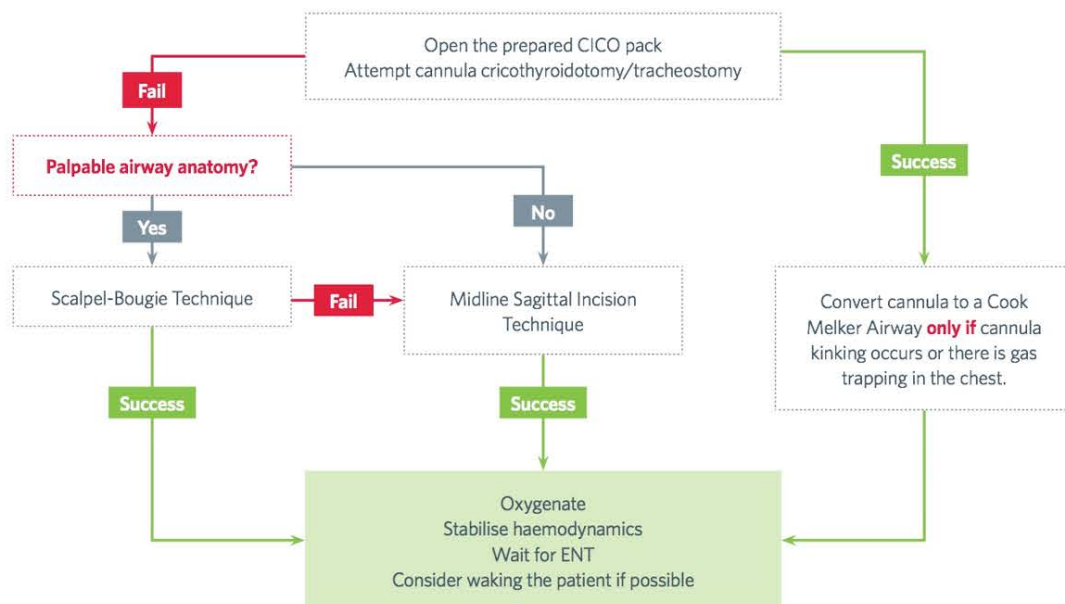
Anaesthesia, PICU, NICU, and Emergency

Plan D: RESCUE CRICOTHYROIDOTOMY/TRACHEOSTOMY

CAN'T INTUBATE, CAN'T OXYGENATE

Perform IF:

1. Child anaesthetised/unconscious with GCS < 8
2. Unable to intubate patient
3. Unable to oxygenate/ventilate patient with either a guedel airway, a laryngeal mask airway, or a two person ventilation technique
4. Oxygen saturation is <80% (< 50% with cyanotic heart disease) with bradycardia
5. No reversible cause (e.g. laryngospasm) and cricoid pressure has been removed
6. Child cannot be woken up



Airway Group

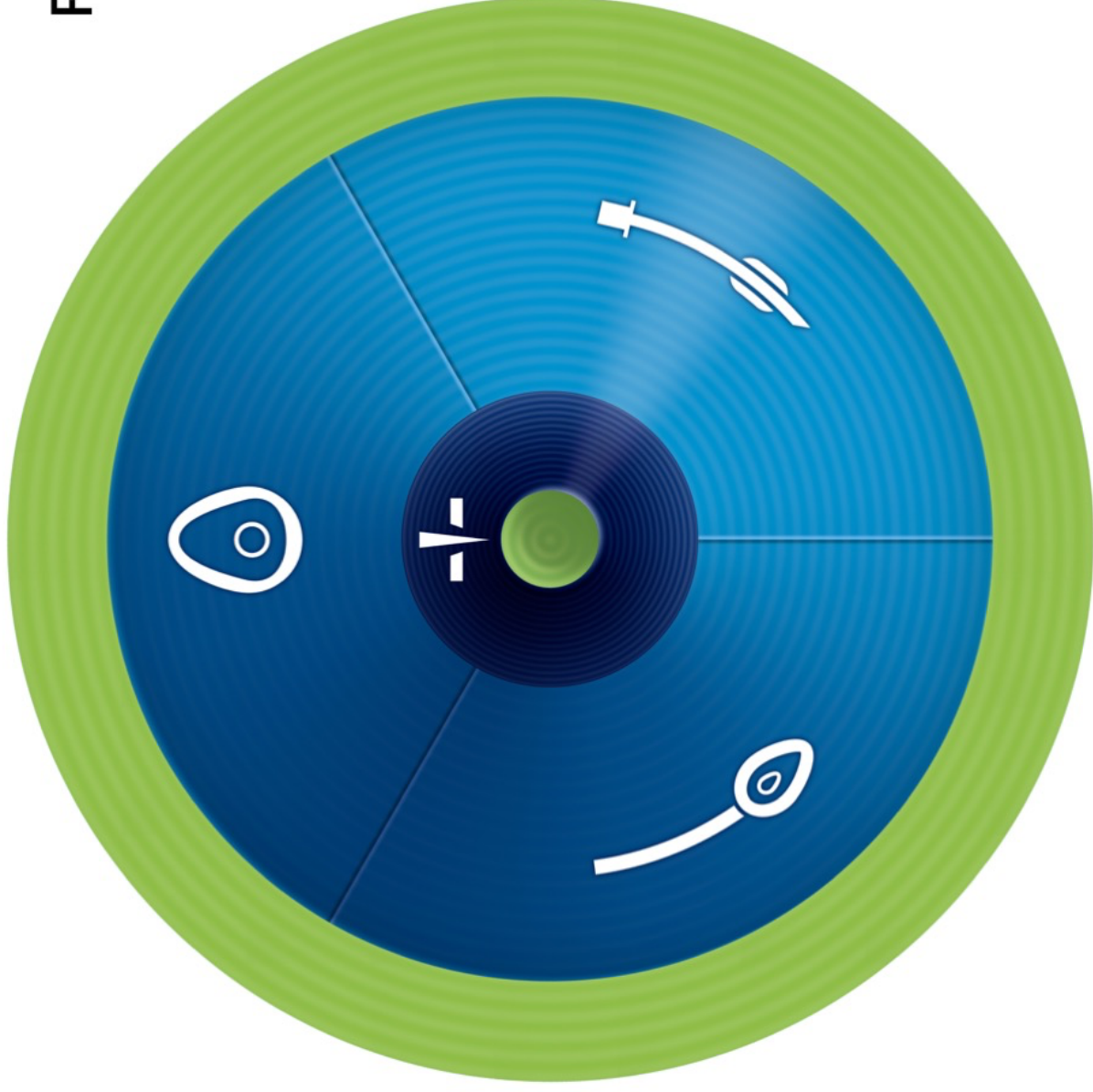
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18/01/17 P.0000000000000000

T H E V O R T E X



FOR EACH LIFELINE CONSIDER:



MANIPULATIONS:

- HEAD & NECK
- LARYNX
- DEVICE



ADJUNCTS



SIZE / TYPE



SUCTION / O₂ FLOW



MUSCLE TONE

**MAXIMUM THREE ATTEMPTS AT EACH LIFELINE (UNLESS GAMECHANGER)
AT LEAST ONE ATTEMPT SHOULD BE BY MOST EXPERIENCED CLINICIAN**

CICO STATUS ESCALATES WITH UNSUCCESSFUL BEST EFFORT AT ANY LIFELINE OR WITH UNSUCCESSFUL ATTEMPTS AT ANY TWO CONSECUTIVE LIFELINES



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Can't Intubate, Can't Oxygenate CICO Pack

Can't Intubate

LMA SIZE	PATIENT SIZE (kg)
Size 1	Neonates up to 5
Size 1½	Infants 5-10
Size 2	Children 10-20
Size 2½	Children 20-30
Size 3	Patients 30-50
Size 4	Patients 50-70
Size 5	Patients 70-100

Laryngeal Mask

Intubation

Laryngoscope

CMAC

ETT Stylet

Endotracheal Tubes
(Include size above
and below)

Magills Forceps

Bougie

Tape

Syringe

Complete Airway Checklist
prior to intubation attempt

Pre Intubation & Adjuncts

Oropharyngeal
Airways

Nasopharyngeal
Airways

Nasal Prongs -
Apnoeic Oxygenation

Yankauer


Capnography

Bag Valve Mask
connected to 15L/min
Oxygen

Nasogastric Tube

<https://www.youtube.com/user/DrAMBHeardAirway/feed>

CICO PEOT




CICO PEOT

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PEOS in the CICO Scenario

PEOS in the CICO Scenario

Instructor Check-lists for Percutaneous Emergency Oxygenation Strategies in the "Can't Intubate, Can't Oxygenate" Scenario

Dr Andrew Heard



By Dr. Andrew Heard

Associated books on management of the CICO scenario

Instructor Check-lists for Percutaneous Emergency Oxygenation Strategies in the "Can't Intubate, Can't Oxygenate" Scenario by Dr. Andrew Heard

Series: *PEOS in the CICO Scenario*. Price: \$10.00 USD. Words: 370. Language: English.
Published: November 19, 2014. Categories: Nonfiction » Health, wellbeing, & medicine » Medicine

Instructor Check-list based round the TRAPPED acronym for Percutaneous Emergency Oxygenation Strategies in the "Can't Intubate, Can't Oxygenate" Scenario

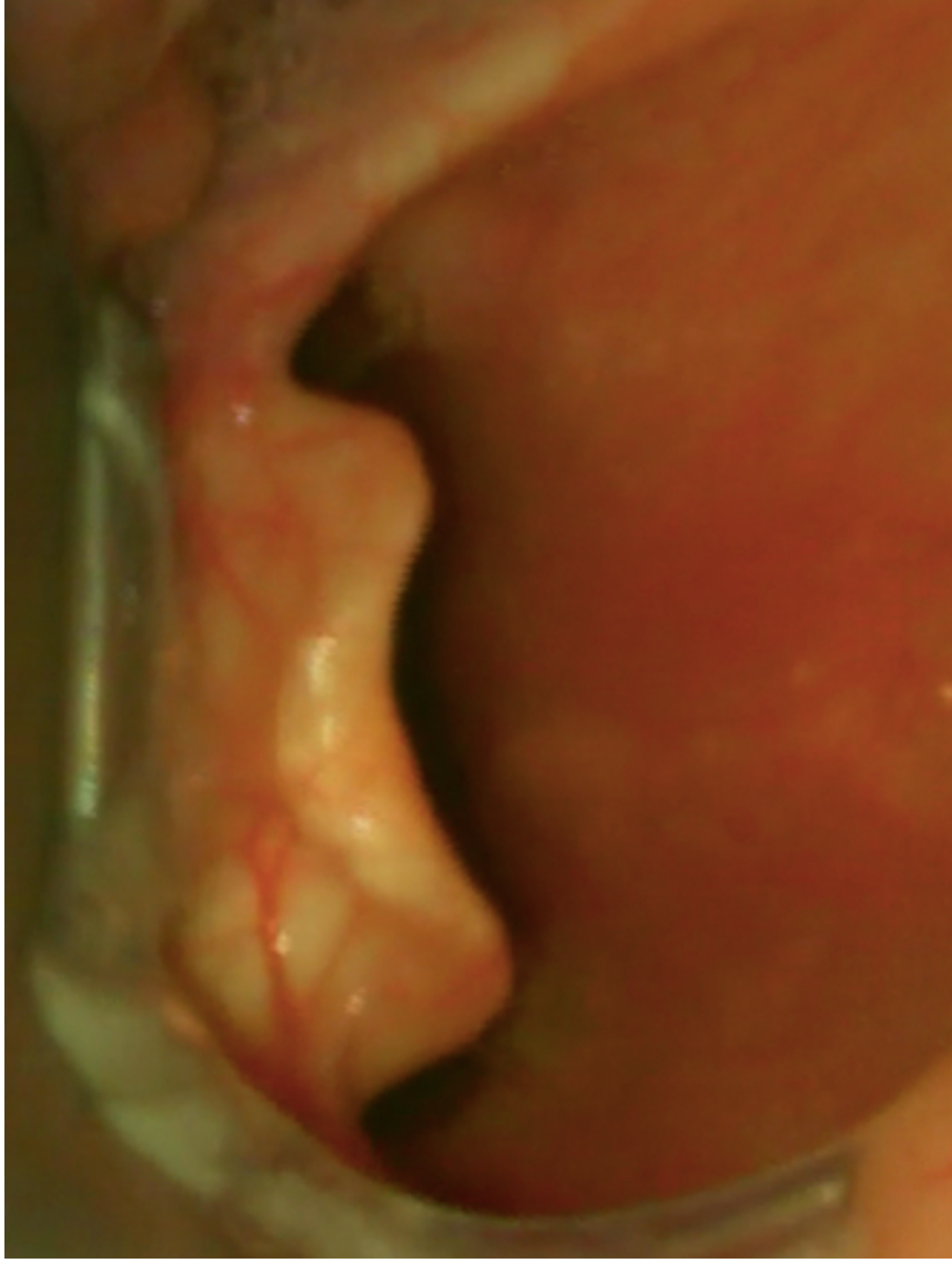
Percutaneous Emergency Oxygenation Strategies in the "Can't Intubate, Can't Oxygenate" Scenario by Dr. Andrew Heard

Series: *PEOS in the CICO Scenario*. Price: \$49.99 USD. Words: 18,210. Language: English.
Published: November 13, 2013. Categories: Nonfiction » Health, wellbeing, & medicine » Medicine

A definitive guide for management of the Can't Intubate Can't Oxygenate Scenario , for Anaesthetists



Safe emergency airway management APLs



Grade 3 larynx, Epiglottitis only



Grade 4 larynx, no structures visualized