

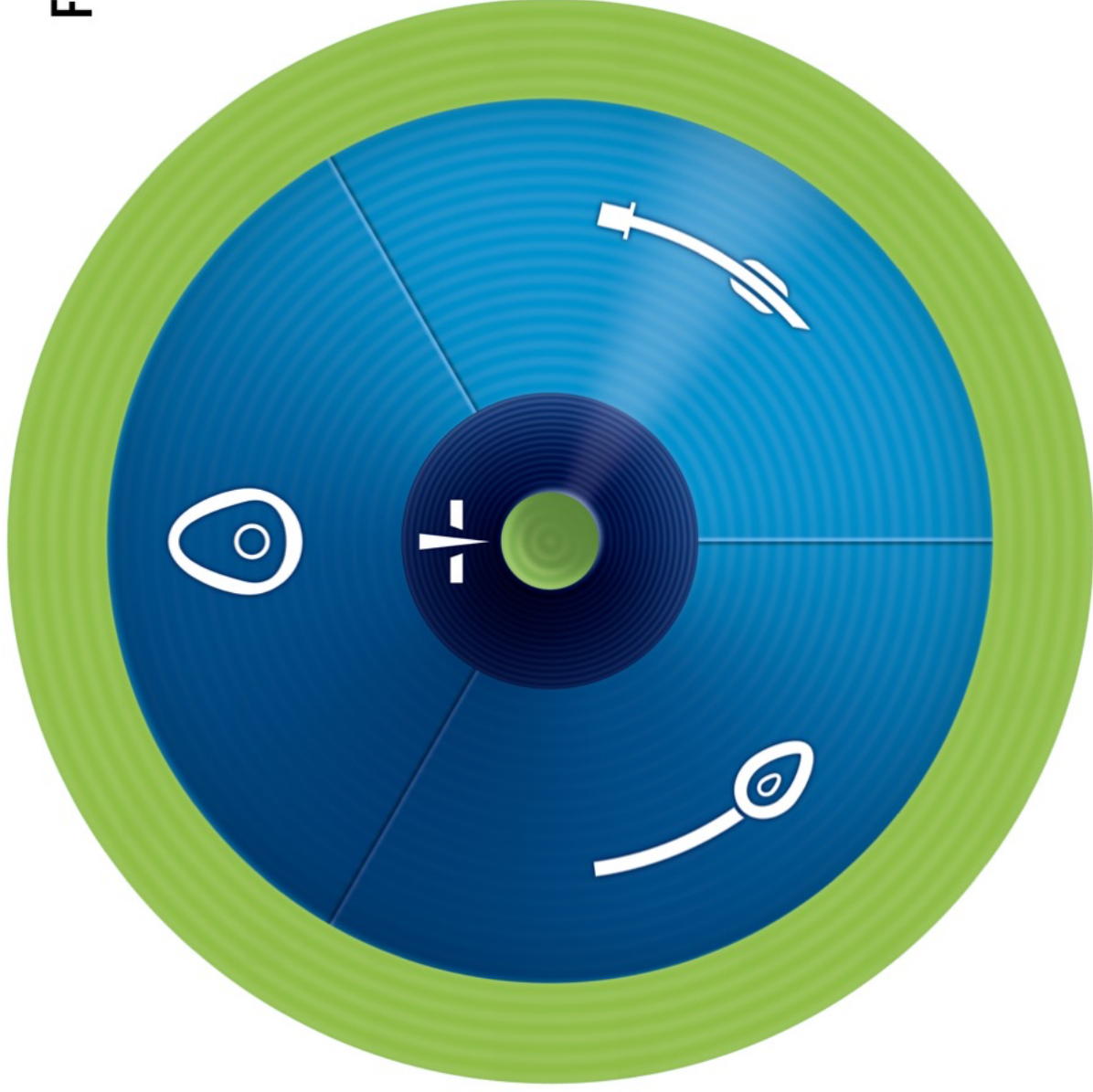
TEAM	PATIENT	IV DRUGS MONITORS	EQUIPMENT
<ol style="list-style-type: none"> <li>1. Notify senior ED doctor</li> <li>2. Verbalise indication for intubation</li> <li>3. Allocate roles</li> <li>4. Confirm intubation plan*               <ol style="list-style-type: none"> <li>A. Initial tracheal intubation attempts x 3</li> <li>B. Final tracheal intubation attempt</li> <li>C. Rescue plan to maintain oxygenation</li> <li>D. Rescue plan for front of neck access</li> </ol> </li> <li>5. Assign lead for post-intubation debrief</li> </ol> <p>* see Emergency Intubation Algorithm</p>	<ol style="list-style-type: none"> <li>1. Optimise <b>haemodynamics</b>, consider:               <ul style="list-style-type: none"> <li>• Fluid bolus</li> <li>• Inotrope/vasopressor</li> <li>• Bolus dose vasopressor drawn up</li> </ul> </li> <li>2. Optimise <b>pre-oxygenation</b>, consider:               <ul style="list-style-type: none"> <li>• 100% FiO<sub>2</sub></li> <li>• PEEP via t-piece</li> <li>• Apnoeic oxygenation (NP) 2 L/kg/min (15L/min)</li> <li>• Elevate head of bed</li> </ul> </li> <li>3. Optimise <b>position</b>, consider:               <ul style="list-style-type: none"> <li>• &lt;1 year: towel/trauma mat under shoulders</li> <li>• &gt;8 years: towel/pillow under head</li> </ul> </li> </ol> <p><b>If any difficulties anticipated</b> <b>CALL FOR HELP</b></p>	<ol style="list-style-type: none"> <li>1. IV access functioning</li> <li>2. Intubation drugs/dose chosen and drawn up</li> <li>3. Cardiac monitoring</li> <li>4. BP (2 minute cycle)</li> <li>5. SpO<sub>2</sub></li> <li>6. EtCO<sub>2</sub></li> <li>7. Post intubation sedation drawn up</li> </ol>	<ol style="list-style-type: none"> <li>1. T-piece/face mask checked for leak</li> <li>2. Suction functioning (yankauer and flexible)</li> <li>3. Airway equipment template complete</li> <li>4. Glidescope at bedside/turned on</li> </ol>

Emergency pre-intubation checklist. Endorsed by the Paediatric Improvement Collaborative.

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# T H E V O R T E X

FOR EACH LIFELINE CONSIDER:



## MANIPULATIONS:

- HEAD & NECK
- LARYNX
- DEVICE



## ADJUNCTS



## SIZE / TYPE



## SUCTION / O<sub>2</sub> 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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**LARYNGOSCOPY** →

**ANY PROBLEM AT ANY TIME** →

**CALL FOR HELP**

- Anaesthetist **ext 52000**
- Operating Theatre **ext 52001**
- PICU **ext 52324**
- NICU **ext 52211**
- ED **ext 52169**
- MET **ext 2222**

Preparation	Assess	Check	Help	Plan	Optimise
	<ul style="list-style-type: none"> <li>• Airway</li> <li>• Severity of condition</li> <li>• Your skills</li> <li>• Get help if difficulty anticipated</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment</li> <li>• Monitors</li> <li>• Drugs for anaesthesia</li> <li>• Resuscitation</li> </ul>	<ul style="list-style-type: none"> <li>• Who?</li> <li>• Availability?</li> <li>• Inform consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss Plans (A, B, C and D) with your team</li> <li>• Nominate a timekeeper</li> <li>• Can this patient be woken up if intubation fails?</li> </ul>	<ul style="list-style-type: none"> <li>• Optimise position of the head and neck</li> <li>• Complete checklist</li> </ul>
<p><b>REMEMBER:</b> successive attempts at intubation must have different personnel, position, or technique.</p> <p><b>MAINTAIN:</b> oxygenation, sedation and paralysis between each attempt.</p>					

Plan A: Up to 3 intubation attempts	<p><b>Pre-oxygenate. Sedate then paralyse. Remove collar and stabilise C-spine.</b></p> <p>Perform video assisted direct laryngoscopy. If unable to see vocal cords:</p>		
	Manipulate larynx	Remove cricoid pressure if applied	Consider bougie
	<p>If unable to oxygenate, go to plan B after a single intubation attempt. Proceed to Plan B if not successful within three minutes.</p>		

**To optimise oxygenation**

- Correct mask size
  - Oral guedel airway
  - Two hands to hold mask
- If still unable to oxygenate, remove guedel and insert laryngeal mask



Plan B: Insert laryngeal mask	<p><b>Re-oxygenate. Check heart rate and blood pressure.</b></p> <p>The <b>best intubator</b> in the hospital at the time to perform a final attempt at intubation</p>		
	Get anaesthetist ext 52000	Prepare hyperangulated blade videolaryngoscope or flexible/fibreoptic scope	Revert to guedel if unable to ventilate
	<p>If unable to oxygenate, go to Plan D immediately. If intubation is unsuccessful, but can oxygenate, do not persist with further attempts, go to Plan C.</p>		

**Verify tracheal intubation**

- Verify with capnography and visually
- If in cardiac arrest, capnography can be unreliable — double check visually
- If in doubt, take it out



Failed intubation with successful oxygenation

Failed Intubation and failed oxygenation with bradycardia (SpO2 <80%, or < 50% with cyanotic heart disease)

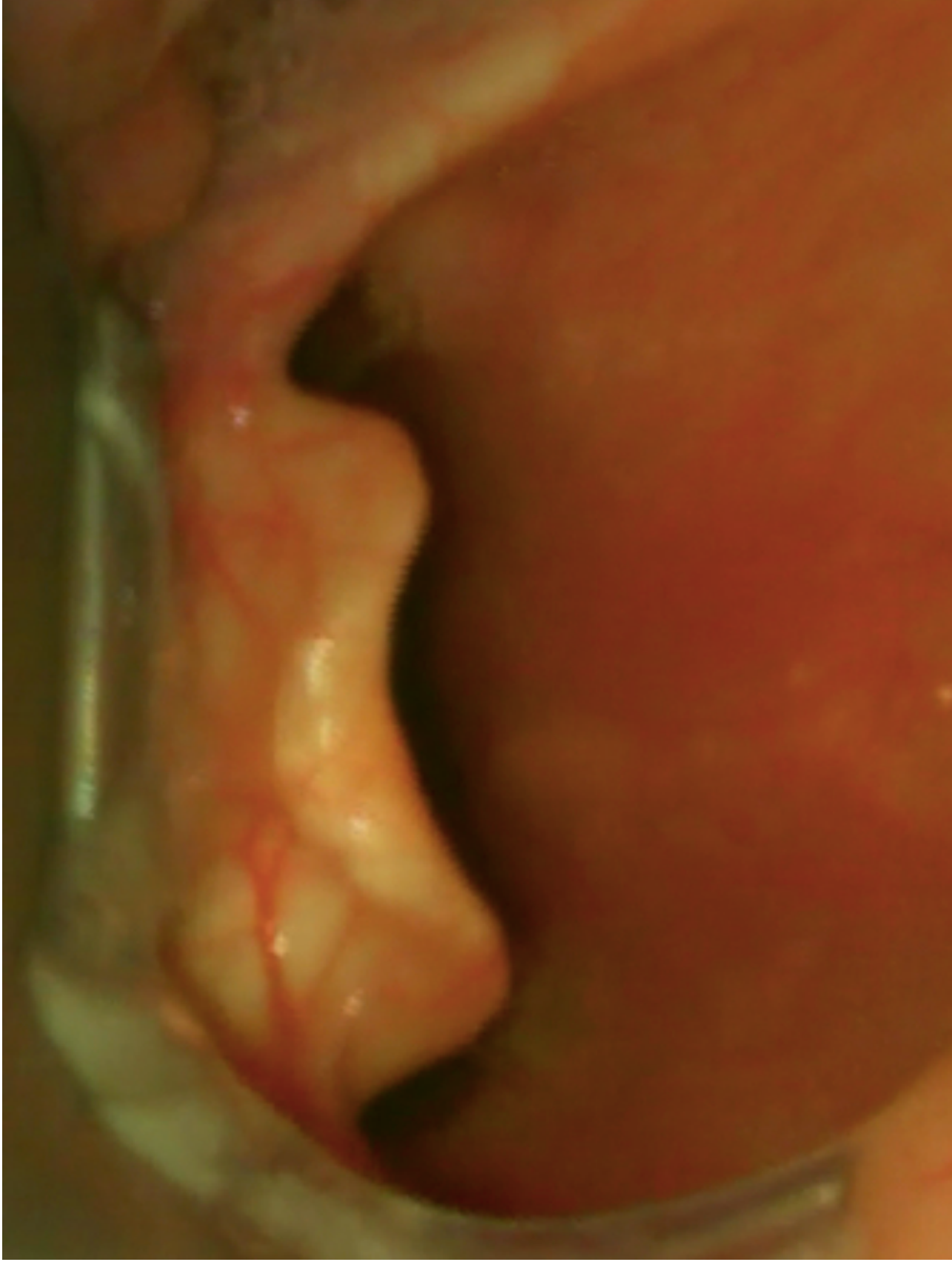
Plan C: Maintain oxygenation	<p>Ventilate via face mask with guedel, or laryngeal mask</p>
	<p>Wake the patient if possible. Call ENT for urgent tracheostomy.</p>

Plan D: Rescue cricothyroidotomy/tracheostomy	<p>Revert to face mask with oral and nasopharyngeal airway</p>
	<p>Perform rescue cricothyroidotomy or tracheostomy.</p>

Emergency airway plan. Endorsed by the Paediatric Improvement Collaborative.

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Grade 3 larynx, Epiglottitis only



Grade 4 larynx, no structures visualized

# Emergency Intubation

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



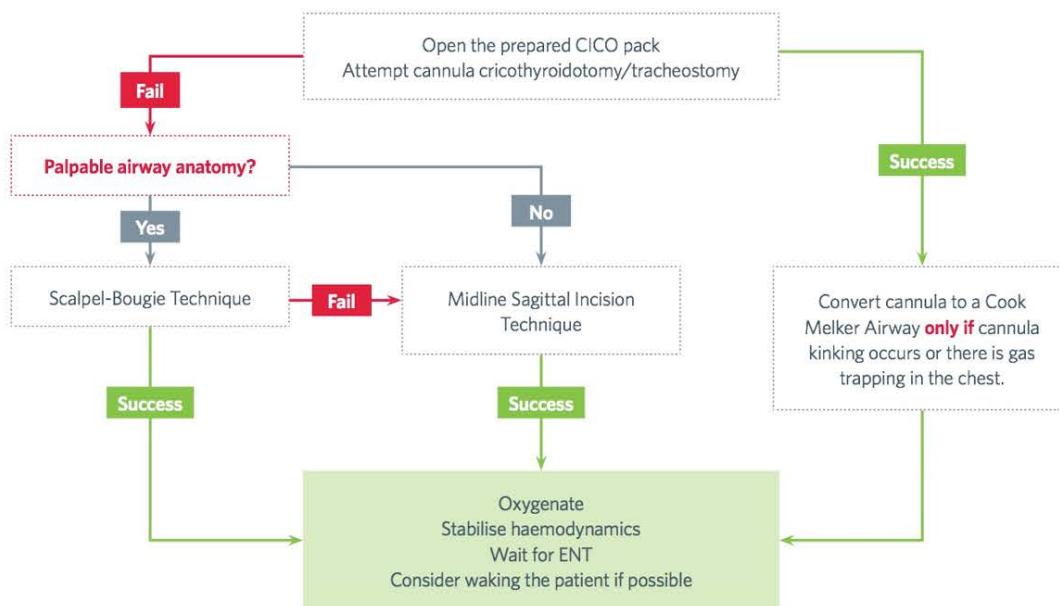
Anaesthesia, PICU, NICU, and Emergency

## 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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