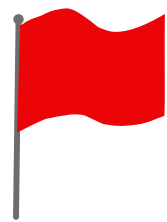


ASSESSMENT AND PREPARATION

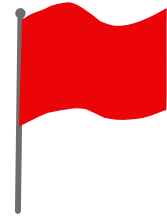
History Red Flags

- Prematurity
- Age <6 months
- Age <12 months + <10 kg
- Extremes of body weight
- Presence of craniofacial syndrome
- Obstructive sleep apnoea
- Previous difficult Intubation
- Systemic illness (sepsis, cardiomyopathy, cardiac failure)



Examination Red Flags

- Respiratory distress/stridor
- Presence of foreign body
- Micrognathia
- Midface hypoplasia
- Congenital neck or airway mass
- Facial asymmetry
- Limited mouth opening
- Limited cervical spine mobility
- Obesity
- Trauma/ infection/ burns



Airway Plan

- 1) Formulate plans A, B, C and D as per the DAS guidelines. [\(QR1\)](#)
 - Verbalise the plan with the team.
- 2) Prepare for failure
 - Prioritise maintenance of oxygenation throughout all airway interventions.
- 3) Call for help early
 - In the presence of red flags consider whether you need a consultant or ENT team on site PRIOR TO INDUCTION.

QR1

DAS
Guidelines

Before proceeding to intubation ask yourself these critical questions:

- | | |
|--|---|
| 1) Is senior expertise required from the outset? | 4) Is this the appropriate setting? |
| • Consider if you need consultant/ ENT presence for induction? | • Should/can this child be transferred to theatre/another centre before intubation? |
| 2) Is all necessary equipment available and checked? | • Close liaison with South Thames Retrieval Service |
| 3) What is the rescue strategy if intubation fails? | |

INTRA-PROCEDURE

Getting the basics right

Teamworking

- Establish team roles and leaders.
- Use a paediatric checklist. [\(QR2\)](#)

Monitoring

- Oxygen saturation with audible tone
- Heart rate
- Blood pressure
- Continuous capnography

Equipment

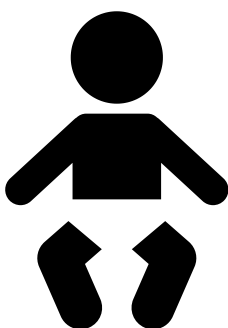
- Calculate appropriately sized equipment. [\(QR3\)](#)
- Ensure presence of all necessary equipment (including sizes above and below). [\(QR4\)](#)
- Nasogastric tube – continuous aspiration from beginning of pre-oxygenation.
- Videolaryngoscope first line.

Drugs

- Ensure adequate depth of anaesthesia.
- Use of neuromuscular blockade (unless spontaneous ventilation is essential).
- Ensure maintenance drugs available.

Optimising airway and ventilation

- Correctly sized facemask
- Correctly sized oropharyngeal airway
- T-piece circuit with adjustable PEEP
- Consider two-handed technique
- Position fingers on the bone of the mandible - avoid soft tissue compression



<2 years

- Neutral head position
- Shoulder roll & head ring
- Nasogastric tube with continuous aspiration



2-8 years

- Neutral head position
- Lift chin until optimal ventilation achieved



>8 years

- Sniffing the morning air position

Role of ENT in airway emergencies

- Every hospital is covered by an on-call ENT team. [\(QR5\)](#)
- Hospital should have essential ENT equipment available and easily accessible. We recommend use of a MAST (making airways safe trolley). [\(QR6\)](#)
- Examples of ENT roles in difficult paediatric intubation:
 - Airway visualisation
 - Ventilation via bronchoscope
 - Foreign body removal
 - Tracheostomy
- Early contact with ENT in the event of a suspected difficult airway.

QR2

Intubation
Checklist

QR3

Equipment
Compatibility
Guide

QR4



Kit Dump

QR5

Out of hours
ENT provision

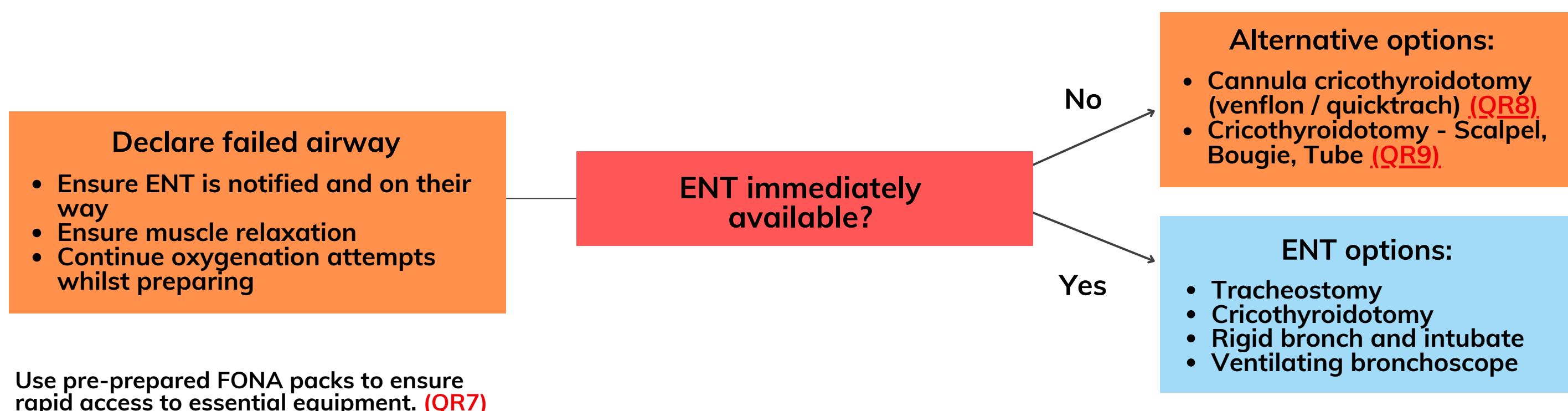
QR6

Emergency
Airway Trolley
Kit List

Managing failure of plan A

- Oxygenation must be maintained throughout.
- Follow your airway plan to maintain oxygenation via a supraglottic airway or facemask ventilation.
- Once oxygenation has been achieved:
 - Avoid repeating unsuccessful techniques
 - Change intubater
 - Reposition the patient
 - Change equipment (consider direct vs video vs fiberoptic)
 - Ensure adequate depth of anaesthesia/ paralysis
- Contact ENT for bronchoscope ventilation.
- Unable to oxygenate and critical signs present (Sats <80% and HR dropping) declare can't intubate can't ventilate and move onto front of neck access.

FRONT OF NECK ACCESS (FONA)



QR7



FONA packs

QR8

Cannula
Cricothyroidotomy

QR9

Surgical
Cricothyroidotomy

For guidance ONLY, not a substitute for experienced clinical judgement. Always consult local policy where available.