2026

MANAGING EMERGENCY PAEDIATRIC AIRWAYS

South Thames Paediatric Network
Transforming Healthcare for Children and Young People

ASSESSMENT AND PREPARATION

History Red Flags

- Prematurity
- Age <6 months
- Age <12 months + <10 kg
- Extremes of body weight
- Prescence 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?
   - *Consider if you need consultant/ ENT presence for induction?*
2) Is all necessary equipment available and checked?
3) What is the rescue strategy if intubation fails?
4) Is this the appropriate setting?
   - *Should/can this child be transferred to theatre/another centre before intubation?*
   - *Close liaison with South Thames Retrieval Service*

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

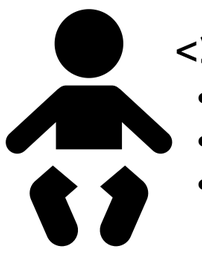
- Calculate appropriately sized equipment. (QR3)
- Ensure presence of all necessary equipment (including sizes above and below). (QR4)
- Nasogastric tube – continuous aspiration from beginning of pre-oxygenation.
- Videolaryngoscope first line.

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 oropharangeal 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 acheived

>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.

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 fibreoptic)
  - Ensure adequate depth of a 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.

QR2
Intubation Checklist

QR3
Equipment Compatibility Guide

QR4
Kit Dump

QR5
Out of hours ENT provision

QR6
Emergency Airway Trolley Kit List

FRONT OF NECK ACCESS (FONA)

Declare failed airway
- Ensure ENT is notified and on their way
- Ensure muscle relaxation
- Continue oxygenation attempts whilst preparing

ENT immediately available?

No →
Alternative options:
- Cannula cricothyroidotomy (venflon / quicktrach) (QR8)
- Cricothyroidotomy - Scalpel, Bougie, Tube (QR9)

Yes →
ENT options:
- Tracheostomy
- Cricothyroidotomy
- Rigid bronch and intubate
- Ventilating bronchoscope

Use pre-prepared FONA packs to ensure rapid access to essential equipment. (QR7)

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.

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