

STPN GUIDELINES

CAN'T INTUBATE, CAN'T VENTILATE SITUATIONS

AND

FRONT OF NECK AIRWAY ACCESS.

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Applicable To:	All STPN Hospitals		

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Algorithm for Management of the Difficult Airway

Suggested Standardised Emergency FONA Packs Contents for Difficult Airway Trolleys

Training

INTRODUCTION:

Guidelines for the management of adult airways have been in use for many years. The same was not the case in Paediatrics until 2015, when the first Paediatric Airway guidelines were produced in UK.

Following on from reported airway incidents in hospitals across the South Thames Paediatric Network and the subsequent STPN Airway Audit, it was identified that there was a need for consistency and clarity across the region for guidelines and management of airway emergencies.

The most daunting of all scenarios is the inability to ventilate or oxygenate a patient and the potential requirement for front of neck airway access.

BACKGROUND:

Difficult airways in children are rare

Usually these can be anticipated, as they are due to obvious congenital airway abnormalities or acute airway pathology. When difficulty is anticipated, expert advice and assistance should be sought prior to any airway intervention or management, if possible.

Difficult ventilation in children without airway abnormality is most often secondary to laryngospasm or upper airway obstruction. These are reversible with appropriate management.

Can't Intubate, Can't Oxygenate (CICO) situations are life threatening emergencies, due to irreversible airway obstruction. They require Front of Neck Access (FONA) to the trachea.

Emergency FONA is potentially life-saving procedure. Even with training it is difficult to perform and especially in small children, infants and neonates.

Equipment required to perform FONA must be pre-prepared and rapidly available in all locations where intubation and airway management takes place.

INDICATIONS:

True CICO emergencies are rare in children

FONA is an emergency procedure in a can't intubate, can't oxygenate scenario.

It should only be performed if there is NO ability to oxygenate a patient, after having tried airway manoeuvres, airway adjuncts, change of operator and ensured that all reversible causes have been treated and the patient has had intubation drugs and paralysis and is not able to be woken up (post administration of reversal agents as necessary)

CRITERIA FOR DECLARING A CICO EMERGENCY:

- **Child is anaesthetised, and cannot be woken rapidly, or is unconscious with GCS <8**
- **Unable to intubate**
- **Unable to oxygenate/ventilate with either an oropharyngeal airway, a laryngeal mask airway, or a two person ventilation technique**
- **Unable to oxygenate/ventilate following change of operator and airway manoeuvres**
- **Oxygen saturation is <80% (<50% with cyanotic heart disease) with bradycardia**
- **All Reversible causes have been excluded**
- **Cricoid pressure, if applied, has been removed**

Continue to attempt oxygenation via a facemask with oropharyngeal airway or supraglottic airway whilst CICO equipment is made ready.

Ventilation may be significantly impaired BUT oxygenation may still be possible. In this situation, there is time to call for help from more senior or more experienced emergency team or an ENT surgeon, for a formal tracheostomy.

FONA should only performed if all measures to attempt to oxygenate have been unsuccessful and an ENT surgeon is not present or immediately nearby.

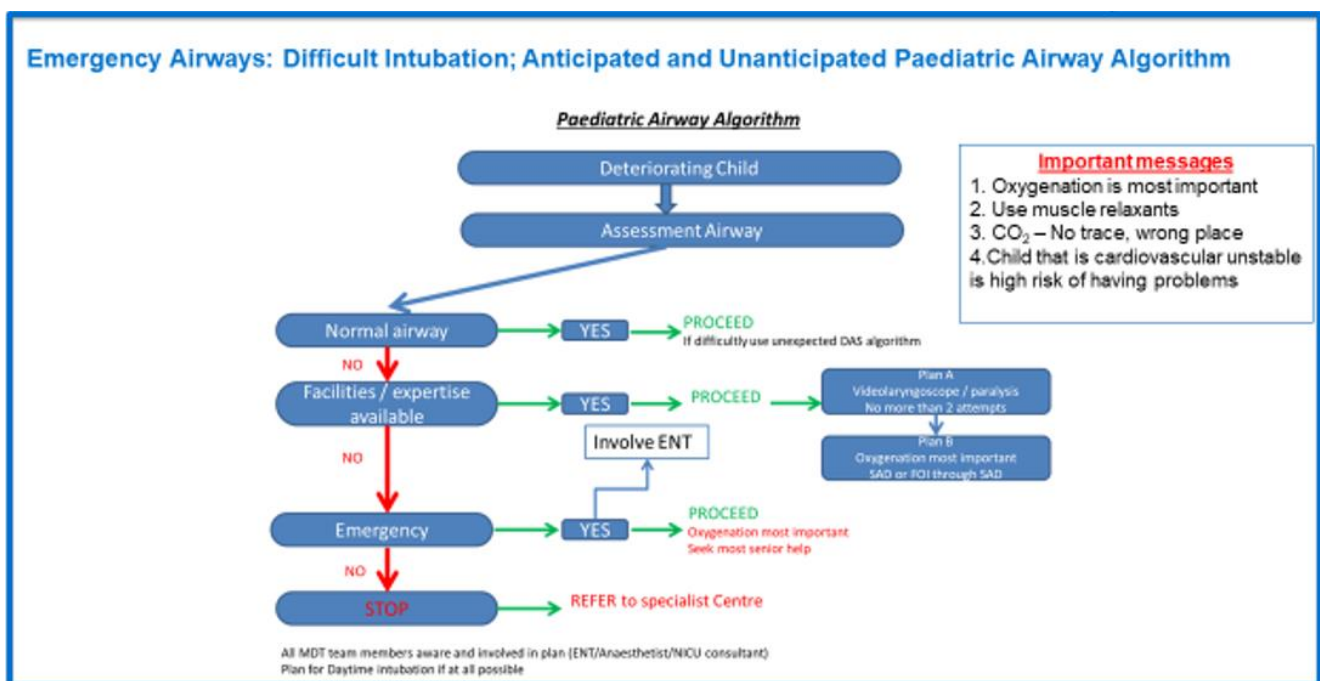
PERFORMING FRONT OF NECK ACCESS:

Successful outcome and access requires technical and non-technical skills which can be enhanced by training and use of standardised equipment that is pre-prepared and readily available
Following RCoA NAP 4, there was a change from use of cannula cricothyroidotomy to a surgical scalpel technique in Adults.

Paediatric guidance currently still favours attempting cannula cricothyroidotomy prior to surgical techniques but there is good evidence for the scalpel bougie tube technique in adult practice and increasing recommendation for paediatric practice to follow similar changes to guidelines.

A few centres are implementing the scalpel, bougie, tube technique in paediatric practice to maintain uniformity of local recommendations for all airway emergencies, regardless of age. This has benefits that training is consistent for all age groups and individuals facing a CICO scenario do not have to remember different algorithms and skills.

ALGORITHM:



<https://rcoa.ac.uk/safety-standards-quality/guidance-resources/capnography-no-trace-wrong-place>

TRAINING:

<https://das.uk.com/content/video/fona>

Aspirational for the Network:

STPN Training of Airway Teams (Anaesthetist, ENT, ODPs and Paediatricians) in each Hospital, which could involve

Airway expert training of small groups with hands on practice using mannequins and exposure to emergency age specific packs.

Repeat training annually.