

Guideline for secretion clearance in the intubated child

This guideline is for the **recently intubated** child where a **high secretion** load is causing **ineffective ventilation** where other key **pathologies** (i.e. **pneumothorax, endobronchial intubation**) have been **excluded**.

For the recently intubated child where ventilation is **effective**, routine secretion clearance is unnecessary

This guideline should be used alongside '**Initiation of ventilation during stabilisation**'

Ineffective ventilation
Unable to establish on ventilator
Low/Falling SpO₂
High/Rising ETCO₂
High Airway pressures
Ventilator asynchrony

Ensure adequate monitoring, sedation and muscle relaxation of child

Wearing appropriate PPE at all times
Disconnect from ventilator and hand ventilate

Confirm depth of ETT and bilateral chest ventilation

Equipment:
Appropriate size syringes
0.9% Sodium Chloride
Suction Catheters
Inline suction (if available)

Guide to volume of 0.9% Sodium Chloride

< 10 kg 2-5ml
>10 kg 5-10ml

Can be repeated

Personnel and Roles

Minimum TWO person
(ideally THREE)

Secure ETT
Manual Bagging
Manual Techniques

Manual Techniques

These should be timed within the respiratory cycle requiring clear communication in the team

Instil 0.9% Sodium Chloride down ETT

Position hands either side of **sternum on midclavicular lines**

Ventilate to see **chest rise twice**
Followed by one **large tidal volume breath**, with a **quick release**

During **this** expiratory phase
Vibrate the chest for **duration of expiration**

Disconnect breathing circuit
Pass suction catheter down ETT.

Set suction to **15-20kPA**
Only applying suction once in position
Slowly withdraw catheter

Reassess ease of ventilation
Can be repeated as 3 cycles [maximum 6 in a set]

If repeated cycles required, allow period of recovery and stabilisation with tidal volumes breaths

Suction Catheter Size

= ETT ID x 2

i.e. 4.0 ETT = 8 FG

Suction Catheter Distance

1cm beyond ETT end

[Remember to include length of ETT connector]

Failure to improve?

Reconsider diagnosis

Rule out pneumothorax

CXR/POCUS Chest

Ensure NG aspirated

If the above steps fail to improve ventilation re-discuss with SORT Consultant
Ensuring continued oxygenation as a first priority