Paediatric Physiotherapy

Nasopharyngeal suction guidelines

Teaching pack for parents/guardians

This teaching pack and associated competency document refer to self-ventilating children only.
Note: If you require training to suction a child with an artificial airway please seek advice from the tracheostomy nursing team or long term ventilation team.

Anatomy

Coughing

In a healthy person a cough is stimulated by secretions in the larger airways (trachea and bronchi). The body’s response is to take a deeper breath in and a forceful breath out (a cough). This is created by the diaphragm (the large muscle separating the lung cavity and the abdominal cavity) and intercostal muscles (the muscles between your ribs).

Some people do not have the strength in their muscles to create an effective cough. Others have too many secretions to be able to clear them independently. These people may require suctioning to clear the secretions in order to prevent build up in the lungs and associated chest infections.
Theory of Suctioning

Indications for suction
- Increased audible/visible secretions
- Unable to cough effectively to clear these secretions
- Decreased oxygen saturations (if measured)
- Abnormal breathing patterns
- Change in colour (for example starts to go blue around the lips)

Hazards for suction
- Increased / decreased heart rate
- Bacterial infection
- Gagging / vomiting
- Spasm along the airway
- Patient distress and discomfort
- Damage to the lining of the airway

After suction check
- Respiratory rate and quality
- Colour
- Heart rate
- Oxygen levels (if already being monitored)
- Quantity, colour and thickness of secretions suctioned

Suction pressure settings and size of suction catheter
Your medical team will advise on the suction pressure and the size of suction catheter that is required for your child.

Depth of suction
To use the suction catheter measure length from nostril to angle of lower jaw (make a note of this number). This number is the furthest the suction catheter should be inserted.
Or stop inserting when a cough is stimulated (if less than measured depth).

My child’s current suction depth is ________________________________

Size of suction catheter is ________________________________

The suction pressure is: ________________________________

Date: ________________________________

This can be reviewed in your child’s annual review clinic due to growth.

Timing
Whole procedure should take no more than 10-15 seconds.
Preparation

Preparation of your child

1) Ask them for consent
2) Explain the reasons for procedure
3) Explain the steps in procedure
4) Reassure them
5) Ensure their position is comfortable and airway is easily accessible

Preparation of equipment

1) Wash your hands
2) Turn on the suction switch and ensure it is at appropriate pressure
3) Ensure you have enough catheters

Procedure

1) Connect the catheter to the suction
2) Apply sterile glove: **Do not touch anything but the catheter with this hand**
3) Insert the catheter into the nasal passage (aiming directly back towards back of head in babies; or towards the opposite eye in an older child)
4) Insert the catheter until cough is stimulated or the child’s designated depth is reached as noted on previous page
5) Place thumb over hole at the end of the catheter to apply suction and withdraw catheter

Please Note: Steps 3 – 5 (combined) should take no longer than 10 to 15 seconds.

Post-Procedure

1) Ensure your child is comfortable
2) Check the oxygen saturations (if appropriate/able)
3) Assess how hard it is for them to breathe
4) Does suction need repeating?
5) Is further help required? (see below)
6) Dispose of the used catheters and gloves. Then clean equipment as needed.

When to seek further assistance

Call 999 if:

- Your child appears to be in distress (for example if they have change in colour or if their breathing is much harder or abnormal for them)
- Oxygen saturations (if monitored) remain consistently low following suction.
Contacts/Further information
For information regarding this leaflet you can contact:
The paediatric physiotherapy team
Phone: 01223 245 151 bleep 156 2120

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Document history
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