



## Nasogastric Tubes

Information for Parents and Carers



## Types of Nasogastric Tubes

Nasogastric tubes are long, thin plastic tubes that are passed via the nose into the food pipe and on into the stomach to a pre-measured length.

There are two main types of nasogastric tubes and these are described below.

### Short-term nasogastric tubes

These tubes can remain in place for between 7-10 days, dependent on manufacturer's guidelines. These tubes are for single use and should be replaced with a new tube if the tube becomes dislodged and falls out.

### Long-term nasogastric tubes

These tubes may have a guide-wire to aid the passing of the tube. Once the tube has been passed, the guide-wire is removed and should be kept in a safe place as it will be required should the tube become dislodged. This tube can normally remain in situ for approximately 8-12 weeks dependent on manufacturer's guidance. Within this time the tube can be cleaned and re-passed.

## Checking the position of the tube

**The position of the tube should be checked before every use, by obtaining aspirate from the stomach as follows:**

- Wash your hands.
- Explain to the child/young person that you are going to check their tube.
- Remove the end cap from the tube and attach a 50ml enteral (purple) syringe (unless contraindicated by manufacturer's instructions).
- Pull back on the plunger until a small amount of gastric contents appears in the syringe (approximately 1–2mls).
- Detach the enteral (purple) syringe from the tube and replace the end cap.

Test the fluid using pH indicator paper or strip. The pH reading should be 5.5 or less.

**If the aspirate is above 5.5 leave for 30–60 minutes and check aspirate again. If aspirate remains high contact your health professional for advice.**

## Bolus Feeding

- Wash hands before and after procedure.
- Prepare equipment and feed in a clean area.
- Check feed type is correct and is within expiry date
- Explain to the child/young person that they are going to have their feed.
- Ensure the child/young person is positioned correctly for feeding.
- **Check the position of the tube before giving the feed, using pH indicator strips and ensure tube is securely taped at the correct length**
- Flush the feeding tube with an appropriate amount of cooled boiled water, according to individual care plan, before and after administration of feed.

**Bottled water is not recommended.**

- Attach syringe without the plunger to the feeding tube.
- Slowly administer the correct amount of feed, according to individual care plan.
- If the feed is running too quickly or slowly, alter the height of the syringe slightly. A feed should take between 15-30 minutes.
- Flush the feeding tube with the appropriate amount of cooled boiled water, according to individual care plan.
- Remove syringe from tube and replace end cap.

### **Pump feeding**

- Wash hands before and after procedure.
- Prepare equipment and feed in a clean area.
- Check feed type is correct and is within expiry date
- Explain to the child/young person that they are going to have their feed.
- Ensure the child/young person is positioned correctly for feeding.
- **Check the position of the tube before giving the feed, using pH indicator strips and ensure tube is securely taped at the correct length**
- Flush the feeding tube with an appropriate amount of cooled boiled water, according to individual care plan, before and after administration of feed.

### **Bottled water is not recommended.**

- Where necessary, decant the required volume of sterile feed and do not top up feed containers once feeding is in progress. Ensure date and time is marked on bottle when commencing feed.
- Set up the pump feeding set and programme the feeding pump as per manufacturer's instructions.
- Remove end cap from the tube and connect the pump feeding set.
- Start feeding pump.
- When feed is completed stop the pump, disconnect the pump feeding set, flush the tube and replace the end cap.

### **If unable to obtain an aspirate**

Using an enteral syringe, insert 3-5 mls of air down the nasogastric tube to push the tube away from the stomach wall then attempt to aspirate via the tube to see if fluid obtained.



Lay the child on their left side if possible and try to aspirate tube.



If able give the child/young person a small drink and try to aspirate tube.



Try to advance the tube a short distance or pull back slightly and try to aspirate the tube again.



If still unable to obtain aspirate remove and re-pass the tube or seek further advice from community nurse or hospital professionals.

## **If tube becomes blocked**

Gently try to flush with warm water using push/pull motion (soda water may be used if available). If not resolved, squeeze tube between fingers along the length of the tube (milking the tube). If the tube remains blocked, then it should be replaced by someone competent to do so.

## **Positioning during feeding**

Wherever possible the child/young person should be positioned in an upright position with their head above the level of their stomach. This position should be maintained for approximately 20 minutes following completion of feed if possible.

If the child/young person shows any signs of shortness of breath (more than usual), sudden pallor, vomiting or coughing stop the feed immediately.

## **Food Hygiene**

- Avoid touching any internal part of the feed container and giving set, such as the spike, with your hand.
- Pre-packed liquid feeds are sterile until opened so they can be used for up to 4 hours if good hand hygiene is employed.
- Opened packages of feed can be kept covered in the fridge at home for 24 hours.
- Feeds made from powder should be made up as required and as directed by dietitian.
- If using powdered feeds a maximum of 4 hours volume should be placed in container for administration.
- Feed container should not be topped up with sterile feed once feeding has started. Instead, the volume required for a maximum eight hour period should be decanted at the start of any period of feeding whilst at home.
- Any unused feed should be discarded after the above time periods.
- Rotate stock so that it does not go out of date.
- Avoid storing feed next to radiators or in direct sunlight.
- Avoid storing feed or equipment in garden sheds or garages when there is a risk of supplies freezing.
- Discard feed that is out of date by pouring it down the sink.

## **Administration of medicines**

Medication administration should only be carried out by someone who is trained to administer medications to a specific child. The person should know the child, the medication(s) that they require and their uses and possible side effects. All medications should be given as per prescription and medication administration recorded (if appropriate).

## Administration of medication via a Nasogastric Tube

### Equipment required

- Medications
- Prescription and recording sheet (if required)
- Consent from parent to administer medication (if required)
- Appropriate enteral syringes
- Cooled, boiled water

### Procedure

- Wash hands before and after procedure
- Check medication, dose and expiry date
- Prepare appropriate dose of medication in individual enteral feeding syringes
- Draw up appropriate amount of cooled boiled water
- Advise child that you are going to give medications
- Remove end cap from tube and attach the syringe with water
- Administer medication: **Remember if more than one medication is being given the tube must be flushed with 2-5mls water between each medicine.**
- Flush with recommended volume of cooled boiled water following medications and clamp tube
- Remove syringe and replace the end cap
- Clean and dispose of equipment appropriately

This information leaflet has been adapted by WoSPGHaN with permission from NHS Lanarkshire Community Children's Nursing Team.

## WoSPGHaN

West of Scotland Gastroenterology, Hepatology and Nutrition Network  
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