

West of Scotland Paediatric Gastroenterology, Hepatology and Nutrition Network



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Gastrostomy Tubes

Information for Parents and Carers



Types of Gastrostomy Tubes

PEG (percutaneous endoscopic gastrostomy)

A PEG tube is inserted during a surgical procedure. The tube is passed into the throat and down into the stomach using an endoscope. The tube is then brought out through a hole between the stomach and abdominal wall, which has been surgically created. There is a small disc at one end of the tube that secures the tube inside the stomach. An external fixator device, a clamp and a feeding connector are then fitted to the external part of the tube. These tubes generally last around 18 months dependent on manufacturer's guidelines.

Balloon inflated gastrostomy

A balloon gastrostomy device is initially inserted during a surgical procedure, either into an established tract or via an incision through the abdominal wall, into the stomach. There are two types of balloon device:

A balloon gastrostomy tube

This tube is held in place in the stomach by a balloon filled with water.

A button or low profile device

This is a small device that is held in place in the stomach by a balloon filled with water. It requires an extension set for the administration of medications or feeds. Only the correct extension set should be inserted directly into the button device to avoid any damage to the button.

Both balloon gastrostomy tubes and buttons are held in place, in the stomach, by a small balloon filled with water. The water in the balloon is changed on a weekly basis. These devices require to be replaced every 3-6 months depending on manufacturer's guidance and individual patient.

Both of these devices can be replaced, **without** a surgical procedure, by **someone who is trained and competent to do so**.

Daily Care of a Gastrostomy Tube

The aim of skin care around the gastrostomy site is the prevention of infection, excoriation and breakdown.

This is best achieved by keeping the area clean and dry.

For the first 10 days post gastrostomy tube insertion:

Following insertion of tube, parents/carers will have been advised, by the hospital staff, how to care for the stoma and tube.

Ongoing care for PEG tube:

- Clean site daily with cooled, boiled water and gently pat dry.
- Rotate tube 360 degrees on a daily basis.
- Inspect skin for signs of redness, swelling, irritation, skin breakdown and leakage.
- Once weekly, loosen the external fixator device, advance the tube approximately 1cm into the stoma, and rotate 360 degrees. This also allows the skin around the stoma site to be cleaned thoroughly.
- Pull the tube gently back to the original position and retighten the external fixator so that it lies approximately 2mm from the skin surface to prevent friction and over granulation.

Ongoing care for Balloon inflated Gastrostomy Tube/Button:

- On a daily basis, clean site with cool boiled water and gently pat dry.
- Rotate tube 360 degrees on a daily basis.
- Inspect skin for signs of redness, swelling, irritation, skin breakdown and leakage.
- The water in the balloon should be changed on a weekly basis, following training from an appropriate person.
- The balloon device should be changed every 3-6 months, according to manufacturer's guidelines and individual child.
- Extension sets should be renewed every 2 weeks.

Positioning during feeding

Where possible, the child/young person should be positioned with their head above the level of their stomach, preferably sitting or supported at an angle of approximately 30 degrees. This position should be maintained for approximately 20 minutes following completion of feed.

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 4-8 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 4-8 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.

Feeding

- Wash hands before and after procedure.
- Prepare equipment and feed in a clean area (checking feed type and expiry date).
- Explain procedure to the child/young person.
- Ensure the child/young person is positioned correctly for feeding.
- Prime extension set with cooled, boiled water and attach to button (if appropriate).
- Flush the feeding tube with an appropriate amount of cooled, boiled water, according to individual care plan and clamp tube/extension set. **Bottled water is not recommended.**

Bolus Feeding

- Attach syringe without the plunger to the feeding tube/extension set.
- Release the clamp and slowly administer the correct amount of feed, according to individual care plan.
- If the feed is running too quickly or too slowly, alter the height of the syringe slightly. A feed should take between 15-30 minutes.
- Flush the feeding tube/extension set, with the appropriate amount of cooled, boiled water, according to individual care plan.
- When feed is complete, close the clamp on the tube/extension set and remove syringe and extension set as appropriate.

Pump Feeding

- 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.
- Connect pump feeding set to feeding tube/extension set, release clamp (if in situ) and start feeding pump. When feed is completed, stop the pump, disconnect pump feeding set, flush the feeding tube with appropriate amount of cooled boiled water and remove the extension set if used.

Administration of Medications

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

Administration of medication via gastrostomy PEG or Button device:

Equipment required

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

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
- Prime extension set with cooled boiled water and attach to button (if appropriate)
- Unclamp tube/extension set and administer 5mls water
- Administer medication. **REMEMBER if more than one medication is being given then the tube must be flushed with 5mls water between each medicine.**
- Flush with recommended volume cooled boiled water following medications and clamp tube
- Remove syringe and extension set as appropriate
- Clean and dispose of equipment appropriately

Problem Solving

Problem	Solution
PEG tube displacement	Seek immediate medical advice at local Accident & Emergency Department.
Gastrostomy Button displacement	Button must be replaced within 1 -2 hours by someone competent to do so.
Leakage of milk/feed from around the gastrostomy	Discontinue feed and seek advice from appropriate professionals.
Discharge from gastrostomy site	Contact community children's/school nurse/specialist nurse for advice.
Skin breakdown around stoma site	Contact community children's/school nurse/specialist nurse for advice.
Overgranulation	Contact community children's/school nurse/specialist nurse for advice.
Vomiting	Discontinue feed and seek advice from appropriate professionals.
Tube blocked	<p>PEG - 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 still unresolved, gently draw back with syringe then try to flush as before. If tube remains blocked, seek medical attention.</p> <p>Button – prime and change extension set and gently try to flush the button with new set. If not resolved, milk extension set as above. If tube still remains blocked, button should be changed by someone competent to do so.</p>

The information in this leaflet was adapted with permission from NHS Lanarkshire Community Children’s Nursing Team by WoSPGHaN.

For more information, please check our website: www.wospghan.scot.nhs.uk



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