West of Scotland Paediatric Gastroenterology, Hepatology and Nutrition Network



Information for Parents, Carers and Health Professionals.

Gastrostomy Tubes



Corflo PEG tube



Mini Button



Freka PEG tube



Mic-Key® Button

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Types of Gastrostomy Tubes

PEG (Percutaneous Endoscopic Gastrostomy)

Insertion of a PEG tube is a surgical procedure. The tube is passed into the throat and down into the stomach using an endoscope. The gastrostomy tube exits through an opening (stoma) between the stomach and abdominal wall that has been surgically created. A small disc at one end 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. PEG tubes generally last around 18 months, dependent on manufacturer's guidelines and healthcare professional guidance. Change of a PEG device usually requires another endoscopy under general anaesthetic and is often done as a day case admission.

Balloon inflated gastrostomy

A balloon gastrostomy device can either be inserted into an established gastrostomy (after a change of PEG device) or as a first procedure through a new incision using an endoscopic or laparoscopic technique, e.g. primary button insertion.

There are two types of balloon device (see diagrams on front cover):

A button or low profile device

This is a smaller balloon gastrostomy device, which is held inside the stomach with a balloon filled with water. An extension set is required to access the device for feeding and medication administration. This extension set can be removed when the gastrostomy button is not in use.



Extension Sets

There are two types of button gastrostomy device, the Mic-key[®] button and the Mini button. The extension sets for each button device differ and care has to be taken to ensure that the appropriate extension set is used for both devices to prevent damage to the button.

Balloon port care of the button gastrostomy device

The balloon volume differs depending on the manufacturer of the device and diameter (Fr size). You will be advised on how much water volume is in the balloon port of the device. The water in the balloon port should be changed every week unless your child has insertion of a primary button gastrostomy device where the **first water change is performed 2 weeks after theatre** and then weekly after this. Do not attempt to change the water of the button device, without training from the appropriate Health Professional.

Change of a button gastrostomy device

Balloon gastrostomy buttons should be replaced every 3-4 months, depending on healthcare guidance and the individual patient. Both of these balloon devices can be replaced, **without** a surgical procedure, by **someone who is trained and competent to do so.**

The Gastrostomy Clinical Nurse Specialist should perform the first button change for a primary button 3 months after it is inserted. If a primary button gastrostomy tube dislodges within the first 3 months following insertion (i.e. before the planned button change), the patient should attend the A&E for review by the surgical team.

For patients that have had a straightforward change of gastrostomy device from a PEG to button device, the first and future changes of device can be performed by the community nursing team or carers once trained. If a patient has undergone a fundoplication procedure then future button gastrostomy change should be discussed with the Gastrostomy team in RHC first.

EN-PLUG-S device and use

EN-PLUG-S device is given to parent's 3 months post their child's primary button device insertion and immediately after a PEG to button device change. Carers must be instructed on use of this device as per EN-PLUG-S guidelines before use (see separate guidance). This device is not given to families, if their child has a PEG tube.

Daily Care of a Gastrostomy Tube

The aim of skin care around the gastrostomy site is the prevention of infection and skin excoriation (inflammation/breakdown) and is best achieved by keeping the area clean and dry. Use Prontosan[®] wound wash/wound gel or water post operatively.

For the first 10 days post gastrostomy tube insertion

Following insertion of the gastrostomy tube, parents or carers will have been advised, how to care for the stoma and tube.

The first full rotation 360 degree of the gastrostomy is performed at day 10 post operative then daily after this.

Ongoing care for PEG tube

- Clean site daily with water or Prontosan[®] and gently pat dry.
- Rotate tube 360 degrees on a daily basis.
- Inspect skin for signs of redness, swelling, irritation, skin breakdown and leakage.
- In the first week after insertion, the fixation device of the PEG should only be adjusted by a trained health professional.
- Carer's should not attempt to adjust the fixation device without the proper training from the community nursing team. Carers will be trained how to adjust the fixation device 4 weeks after their child's PEG was insertioned.
- The advancement of the PEG tube into the stomach should be performed 4 weeks after first insertion and then once a weekly after this.
- Advance the PEG tube approximately 2 cm into the stoma, and rotate 360 degrees. This also allows the skin around the stoma site to be cleaned thoroughly and prevent the lining of the stomach wall growing over disc on the inside.

- 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.
- Replacement connector ports or Y end adapters for the PEG device should be ordered.

Ongoing care for a button gastrostomy device

- On a daily basis, clean site with water and gently pat dry.
- Rotate tube 360 degrees on a daily basis for established gastrostomy tracts.
- Primary button device insertion start to rotate the device at day 10 post operative and then daily after this.
- Inspect skin for signs of redness, swelling, irritation, skin breakdown and leakage.
- Change the water in the balloon on a weekly basis, following training from an appropriate person. After a primary button placement the first water change of the balloon should be performed after 2 weeks post insertion and then weekly thereafter.
- If the child has an external stitch around their primary button gastrostomy device, this stitch will be removed by the Gastrostomy CNS in the outpatient department, 7 days after theatre/as per surgical instruction.
- Change the balloon device every 3-4 months, according to healthcare guidance and individual child.
- Renew extension sets every 2 weeks.
- Your child can go swimming 6 weeks post operation.
- Baths and showers can be taken 3-5 days post operation, however if bathing before this time, the gastrostomy site should not be submerged in the water.

Bolus and pump feeding through a gastrostomy

- Attach syringe without the plunger to the feeding tube or 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 20-30 minutes.
- Flush the feeding tube or extension set, with the appropriate amount of cooled, boiled water, according to individual care plan.
- Bottled water is not recommended.
- When feed is complete, close the clamp on the tube or extension set and remove syringe and extension set as appropriate.

Pump feeding

- If your child is on a pre packed liquid feed, then attach the giving set and run the feed as directed.
- If your child is on a powdered feed, 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. Check the expiry date of feed prior to use.
- Set up the pump feeding set and programme the feeding pump as per manufacturer's instructions.
- Connect pump-feeding set to feeding tube or 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 medication via gastrostomy PEG or button device

Administration of medications to a specific child should only be carry out by a trained competent person. This person should have knowledge of the child, the medications that they require, their uses and possible side effects. Give all medications as per prescription and medication administration record (if appropriate). If any doubts, check with the pharmacist.

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 or extension set and administer minimum 5mls water.
- Administer medication.
- **REMEMBER** if giving more than one medication the tube must be flushed with 5mls water between each medicine.
- Do not mix with feed.
- Following medications flush with the recommended volume of cooled boiled water and clamp tube.
- Remove syringe and extension set as appropriate.
- Clean and dispose of equipment appropriately.

All gastrostomy equipment and syringes for enteral feeds should be EN-FIT-ISO compatible.

Problem Solving

Problem	Solution
PFODIEM PEG tube displacement	Seek immediate medical advice at local Accident & Emergency department
Gastrostomy Button displacement	A replacement gastrostomy device should be inserted within 1-2 hours by someone who has completed appropriate training. If trained, the appropriate EN-PLUG-S should be inserted into stoma if spare gastrostomy tube cannot be inserted. If a primary button device dislodges within 3 months of insertion the patient should attend A&E for review by the surgical team. NO button device/en plug-s device should be inserted into the gastrostomy until review in this case.
Leakage of milk or feed from around the gastrostomy	Discontinue feed and seek advice from appropriate professionals
Discharge from gastrostomy site	Contact community children's nurse, school nurse or GP for advice
Skin breakdown around stoma site	Contact community children's nurse, school nurse or GP for advice
Redness/irritation at gastrostomy site	Use prontosan gel or wound wash to cleanse gastrostomy site instead of water.
Overgranulation	Contact community children's nurse, school nurse or GP for advice

Problem	Solution
Persistent and troublesome gastrostomy site	Please refer to specialist gastrostomy nurse by phone or email referral.
Tube blocked	 PEG – Gently try to flush with warm water using push and pull motion with a 20ml syringe, to try to aspirate/remove the blockage and then try to flush as before. You may have to open the PEG fixator device to help unblock the device. If tube remains blocked, seek medical attention. Button – Prime and change extension set and gently try to flush the button with new set. If the tube remains blocked, the button must be changed by someone competent to do so.

Contact Details Gastrostomy/Stoma Clinical Nurse Specialist

Telephone: 0141 452 4903 Email: GG-UHB.paediatricstomaandgastrostomynurses@nhs.net

Gastrostomy/Stoma team

Louise Paterson	Gastrostomy Clinical Nurse Specialist
Jenna Tarr	Stoma Clinical Nurse Specialist
Julie Ferguson	Gastrostomy/Stoma Nurse Support

For Gastrostomy information in hospital and at home please visit the following website:

What?Why? Children in hospital

Email for home feeding company

https://www.nutriciahomeward.co.uk/home/

Waiting for a surgery date

Any waiting list queries or surgical referrals should be directed to the appropriate surgical secretary through switchboard.

Community Children's Nursing Team contact number

Children's Community Nursing Team - Forth Valley

Forth Valley Royal Hospital, Larbert, Falkirk FK5 4WR

Tel: 01324 567 175

Community Children's Nurse Team - Dumfries and Galloway

The Willows Children and Young Peoples Centre Dumfries DG1 4TG

Tel: 01387 220 021

Community Childrens Nurse, Integrated Community Childrens Nursing Service - Lanarkshire

Level 3 Wishaw General Hospital 50 Netherton Street Wishaw ML 2 0DP Tel: 01698 366035

Community Children's Nurse - Paisley RAH

Panda Centre Royal Alexandra Hospital Corsebar Road Paisley PA2 9PN Tel: 0141 314 6044

Community Children's Nursing Team - Glasgow

West Ambulatory Care Hospital Ward 4a Dalnair Street Glasgow G3 8SQ Tel: 0141 201 0677

Community Children's Nursing Team - Vale of Leven

Acorn Centre 1st Floor Vale of Leven Hospital Alexandria G83 0UA

Tel: 01389 817 429

Inverclyde Community Childrens Nursing Team Specialist Childrens Services - Inverclyde

Skylark Centre Level L-North Inverclyde Royal Hospital

Tel: 01475 505 065

Community Children's Nurse - Argyll and Bute

Cowal Community Hospital 360 Argyll Street Dunoon PA23 7RL Tel: 01369 763 425

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

