

Service: **Medicine**

**Percutaneous Endoscopic
Gastrostomy (PEG)**

**Per-Oral Image Guided
Gastrostomy (PIGG)**

**Radiologically Inserted
Gastrostomy (RIG)**



Introduction

This booklet aims to provide you and your relatives/carers with information about gastrostomy tubes. A member of the medical team, your dietitian or your speech and language therapist can answer any further questions you may have.

What is a gastrostomy tube?

A gastrostomy is a small flexible tube that passes through the skin directly into your stomach. This allows specialised liquid feed, water and medicines to be passed into the stomach to help meet your nutritional needs. There are several types of gastrostomy tube which are named after the procedure for placing the tube. The three different procedures used in North Bristol NHS Trust are:

1. Percutaneous Endoscopic Gastrostomy (**PEG**) a procedure that uses an endoscope (flexible camera that passes into your stomach) to place it.
2. Per-Oral Image Guided Gastrostomy (**PIGG**) where the tube is placed under x-ray guidance.
3. Radiologically Inserted Gastrostomy (**RIG**) where the tube is placed under x-ray guidance.

The standard gastrostomy is the PEG. RIG and PIGG tubes are only placed in patients who have health risks following sedation or when an endoscope cannot access the stomach.

We will discuss with you which type would be best for you.

Why do I need a gastrostomy tube?

There are several reasons why a person may need a gastrostomy tube and this will be discussed fully with you.

It is time to consider a gastrostomy when:

- Your weight and oral intake continues to decrease.
- Eating and drinking leads to frequent choking or discomfort.
- Your breathing function is impaired or you experience frequent chest infections
- It takes a long time to eat and it is no longer a pleasurable activity for you.
- You have been reliant on NG (Nasogastric) feeding (tube feeding through the nose) for several weeks and are likely to require longer term tube feeding.
- You have not been able to keep NG tubes in place
- You need to remain Nil by Mouth.

Sometimes they are placed in advance if problems with swallowing are anticipated to occur as a result of your illness or future treatment.

Will a gastrostomy stop me eating and drinking?

Not necessarily, but this needs to be discussed with your doctor or speech and language therapist as it depends on your medical condition. The tube itself will not make a difference to whether you can eat and drink. Some patients decide to continue a small oral intake for pleasure if it is safe to do so.

What are my other options if I decide against having one?

If you decide against a gastrostomy it is unlikely that there are any other methods of meeting your nutritional needs. You would need to discuss your options with your doctor. If you decide against tube feeding you will be supported in this decision, but please ensure you understand the risks you may be taking.

How do I prepare for a gastrostomy?

All types of gastrostomy tube are placed in hospital. If you are not already on a ward you will need to be admitted on the day of the procedure. A few days before the procedure you will need to have a blood test which can be done by your GP. Once you are in hospital the doctor will examine you, explain the procedure and ask you to sign the consent form. It is likely you will need to stay in hospital for a few days to establish feeding via your new tube unless told otherwise. You will be instructed not to eat for 6 hours prior to the procedure and not to drink for 2 hours prior to the procedure. You may be given some oxygen, medications or sedation and some fluids as a drip before the procedure.

Are there any possible complications?

Although the procedure is relatively safe and major complications are rare (1-3% of cases) there are some risks including:

- Breathing problems (1% of cases).
- Peritonitis (2% of cases).
- Bleeding (3% of cases).
- Bowel perforation (2-3.5% of cases).
- Wound infection (5-25% of cases).
- Minor complications of tube leakage (58-78% of cases, problematic in 12-39% of patients) and blockage (16-31% of cases at 18 months).

There is a small mortality rate (0.53%) as with any surgical procedure. In order to minimise this, we will choose the technique that is safest for you and make sure you are as fit as possible before the procedure.

How is the tube placed?

If you are having a PEG



You will be given a local anaesthetic to your stomach. An endoscope (a flexible tube with a light and camera at one end) is then passed down into your stomach and lit up. A small cut is made in the skin of your abdomen where the light shines and the PEG tube is then passed through.

The whole procedure usually takes around 15 -20 minutes.

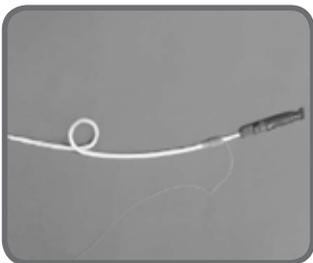
If you are having a PIGG



A nasogastric tube (NG) is passed through your nose into your stomach. Air will be passed into your stomach via the NG tube to make it visible on x-ray. Local anaesthetic will numb your stomach, a small cut is made in the skin of your stomach and the PIGG tube is then passed through.

This procedure typically takes 30 minutes.

If you are having a RIG



A nasogastric (NG) tube is passed through your nose into your stomach. Air will be passed into your stomach via an NG tube to make it visible on x-ray. Local anaesthetic will numb your stomach, a small cut is made in your skin above your navel and the RIG is passed through.

This procedure typically takes 30 minutes.

What happens afterwards?

Once back on the ward it is necessary to wait between 4-24 hours before you can use the tube. The nursing staff will inform you when you will start to use the tube. A water flush will be delivered first and then feeding as required. Your dietitian will discuss the amounts and timings for feeding with you in order to meet your nutritional needs when you go home. Specialist feeds, water and medications can be put down the tube using a syringe. You will need to be positioned at an angle of at least 45 degrees during feeding and for 60 minutes afterwards.

We will train you and/or your relatives/carers how to give the feeds or water flushes as soon as possible so that you can go home quickly. Either the nursing staff on the ward or nurses from the home feeding team in the community can provide the training.

Immediately after your tube has been inserted there is an increased risk of complications and if you are going home within 72 hours post insertion you will need to be aware of the signs and symptoms.

If there are:

- **leaks of fluid around the tube**
- **pain on feeding**
- **new bleeding**

Stop feed immediately and telephone

[appropriate 24/7 local service] **or visit** your local accident and emergency department **for urgent advice**

How do I look after my gastrostomy?

PEG / PIGG

1-5 days post- insertion

You will remain nil by PEG and mouth for at least 4 hours post insertion. The nursing staff will flush the PEG initially using sterile water and will then give further guidance.

Your PEG tube should be flushed with water before and after feeding as well as after administration of medication in order to prevent the tube blocking. If you are not giving nutrition/ medications via the tube you must still remember to flush it a minimum of twice per day with 30ml water.

Clean the site daily with sterile water/saline once-twice per day for 5 days. After 5 days mild soapy water may be used. Ensure the area around the tube is dried gently but thoroughly. Do not reposition the fixation device (triangle) unless advised.

Check for signs of pain, redness, swelling or leakage. Report any concerns to medical staff. The site should be allowed to air dry, but a dressing may be applied if there is leakage around the stoma site.

2 weeks post insertion

Continue to flush the tube regularly with tap water (minimum 30ml twice per day)

Clean the site including around the fixation device with mild soapy water.

Some people may experience an overgrowth of skin around the tube inside the stomach, (we call this 'buried bumper' syndrome). In order to prevent it, the gastrostomy should be rotated 360 degrees and advanced inwards 2-3cm each day, **but only once the tract has healed**. Seek advice from your home feeding nurse if you are unsure. The fixation device

(triangle) must be released and moved in order to advance and rotate the tube. Once this has been done it should be replaced 5mm from the surface of the skin.

You should not use the tube to administer anything other than what has been directed by your doctor, nurse or dietitian.

RIG

24 - 48 hours post insertion

You have to remain nil by RIG and mouth for 24 hours. You will need to keep an NG tube in for 24 hours post RIG insertion and have intravenous fluids to keep you hydrated. If safe you may be allowed to take sips of water.

After 24 hours the tube may be flushed with 50mls sterile water. If there are no concerns after 2 hours feeding can commence. If there are signs of pain or leakage you may need to remain nil by RIG for another 24 hours and see a doctor.

You may have a dressing over the RIG to ensure the tube and stitches remain in place. Clean the site daily with sterile water/ saline. Ensure the area around the tube is dried gently but thoroughly.

An extension set will be provided to insert into the end of the RIG so that the tube may be clamped. This should be replaced weekly.

After 5 days

The dressing can be changed and the stitches removed after 5 days. You may need further dressings for 2-3 weeks but your nurse will advise you on this.

Clean the area daily with mild soapy water, **do not push / pull or rotate the tube.**

Continue to flush the tube regularly with water. You should not

use the tube to administer anything other than what has been directed by your doctor, nurse or dietitian.

What support is available once I leave hospital?

Your ward dietitian will refer you to the community home feeding team known as home management services (HMS) or an alternative community enteral feeding service in your area. The team comprises of a dietitian, home feeding nurse and delivery company. They will contact you to arrange a monthly delivery of feeds and plastic equipment to your discharge destination. This takes three working days to organise so we may initially send you home from hospital with a small supply of feeds and equipment.

Your ward dietitian will explain your home feeding regimen and provide contact details for the HMS team. Your district nurse, care agencies and GP may also be involved in the care of your gastrostomy.

What do I do if the tube becomes blocked?

Prevention is better than cure so we recommended you should always flush the tube with a minimum of 30mls water before and after administering each medication and feed down the tube.

Medicines may need to be prescribed in a more suitable form i.e. liquid/dispersible, your doctor or pharmacist should arrange this for you. Each medication should be given individually.

In order to prevent tube blockage, we advise that you do not give any liquidised food or drinks via your tube. Giving anything other than the specialist feeds provided can increase the risk of the tube blocking/degrading.

If you find you are unable to flush the tube or can see a blockage we would recommend to:

1. Ensure all clamps are open and the tube is not kinked.
2. Massage the external portion of the tube to try to dissolve any blockages.
3. Flush with 50mls warm or soda water, leave for 30mins and re-flush (never use acidic solutions such as pineapple juice, cola or lemonade as they can curdle feed in the tube and worsen a blockage).
4. Try the 'push/pull' action with a syringe as advised by nursing staff.
5. Contact your HMS (Nutricia) nurse/District nurse or call the 24 hour helpline if the tube remains blocked.

How long will I need the tube?

The gastrostomy tube can be removed if you no longer need it or decide you want it taken out. It is made from polyurethane which does not react to the human body and if well cared for can last several years.

What do I do if the tube is accidentally removed?

If the tube comes out you will need to attend your nearest accident and emergency department immediately. The longer the stoma is left without a tube in situ the greater the risk of it closing over.

Common questions

1. Can I shower/bath?

You can shower from the day after the tube has been placed. Avoid having a bath for at least 4 weeks until the tract around the tube has healed. Ensure the end is closed and clamp applied. Dry the area thoroughly.

2. Can I swim?

Only once the tract has healed (at least 4 weeks after placement). Use a waterproof dressing and ensure that you dry the area thoroughly.

3. Can I go on holiday?

Gastrostomy feeding does not stop you going on holiday, but it may be prudent to take a GP letter and necessary insurance documents with you. Contact the home feeding team for further information regarding feed supply and replacement tubes.

4. Will I be able to move freely?

The gastrostomy will not restrict your everyday activities and can be covered with loose clothing.

5. What happens if I become unwell?

If you feel unwell and are unable to give yourself your feed it is important to keep hydrated and prevent the tube blocking by flushing it regularly with water. Speak to your GP, nurse or dietitian if you are concerned.

6. How do I keep my mouth clean?

You will need to keep your mouth and teeth clean by brushing regularly. A mouthwash and artificial saliva spray may be of benefit to keep your mouth moist.

7. Who pays for the feeds?

If you are an NHS patient and registered with a GP your local health authority will pay for the feeds.

References and Further Information

PINNT supports people on enteral and parenteral nutrition providing advice and local support groups.

Telephone 01202 481625

www.pinnt.com

Potack Z, and Chokhavatia S (2008) Complications and controversies associated with Percutaneous Endoscopic Gastronomy. Report of a Case and Literature Review. The Medscape Journal of medicine 10 (6) 142

NHS Constitution. Information on your rights and responsibilities. Available at:

[www.nhs.uk/aboutnhs/ constitution](http://www.nhs.uk/aboutnhs/constitution)

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How to contact us:

For community support
HMS (Home Management Service)
24 hr helpline



08457 623 664

Hospital Dietitian:



District Nurse Telephone Number:





www.nbt.nhs.uk

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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