

Radiologically Inserted Gastrostomy (RIG): Helping you decide

This leaflet is intended to help you and your relatives, or carers, understand more about having a gastrostomy or RIG tube. Considering tube feeding can feel daunting, this leaflet will explain how and why gastrostomy tubes are placed, the risks and benefits, the procedure and care required. It is important that you fully understand your feeding options to support your decision making.

With certain medical conditions or treatments some people may require tube feeding to provide essential nutrition and hydration that is normally provided by eating and drinking. RIG feeding is a way of providing liquid nutrition via a feeding tube placed directly into the stomach through the abdominal wall.

How can a RIG tube help?

There are a number of reasons for needing a RIG tube for example if you are unable to take enough food and drink by mouth or if a planned treatment is likely to affect your ability to swallow, eat or drink.

Difficulty with swallowing, or not having the ability or appetite to eat, can be upsetting for you, your family and carers. A RIG tube may help remove the anxiety and pressure, which often accompany mealtimes, by providing some or all of your nutrition.

Who looks after the RIG tube?

You and your relative or carer should be able to look after the feeding tube independently. You will be shown how to care for your tube before you are discharged from hospital.

What are the risks and complications associated with having a RIG tube?

RIG tube insertion is generally considered a safe procedure and serious complications are rare. Even so, no procedure is totally risk free.

Pain: You may feel some pain or discomfort during the procedure but you will be given sedation and local anesthetic to reduce this. After the procedure you may experience some localized pain or tenderness. This is normal and can be controlled with regular analgesia (pain relief). Longer term pain is rare and most people are pain free within 4-7 days.

Bleeding: Very rarely, a blood vessel can be punctured accidentally when passing the needle into the stomach. This can result in bleeding.

Damage to another organ: Damage to other organs is rare as image guidance is used throughout the procedure.

Peritonitis: Peritonitis is inflammation of the lining of the abdominal cavity. This can occur when feed or medicines enter the abdominal cavity. You will be closely monitored for 24 hours after your tube is inserted and only fed when safe to do so.

Wound Infection: An infection can occur after the insertion of the RIG tube. Antibiotics are given at the time of insertion to minimize this risk. Wound infections are usually confined to the skin site and may require additional antibiotics.

Overgranulation: Overgranulation is often described as extra tissue growing at the insertion site. It can be sore and bleed a little on contact. This is due to persistent movement of the tube within the tract. You will be shown how to minimise this.

Tube displacement: After insertion there is a small risk of the tube becoming displaced or falling out, you will have instruction on how to minimise this and what to do if it happens.

How is the RIG tube inserted?

A specially trained doctor called a radiologist will perform the procedure. Radiologists have special expertise in using x-ray equipment and interpreting images. In addition to the radiologist, there will be a radiographer and a nurse present in the room to assist during the procedure. Occasionally student radiographers or medical students will be present to observe the procedure.

You will lie on the x-ray table, generally flat on your back. A needle will be placed into a vein in your arm for sedation and a monitoring device attached to your finger. The radiologist will pass a narrow tube down your nose and into your stomach. This will come out after the procedure.

The skin below your ribs will be cleaned with antiseptic and the rest of your body will be covered with a theatre towel. The radiologist will use the x-ray equipment to decide on the most suitable point for inserting the feeding tube. This will generally be below your left lower ribs. The skin in this area will be anaesthetised. This can sting a little to start with, but rapidly wears off.

The radiologist will use two to three sutures to hold the stomach wall in position; these are often referred to as 'buttons'. A needle is then passed into your stomach to allow placement of a guidewire; the needle is removed leaving the guide wire in place. A series of small tubes are passed over the wire, one after another, to enlarge the tract from the skin into your stomach. Once this tract is wide enough, the feeding tube is placed through the skin and into your stomach. The guide wire is removed, the tube remains in place by a balloon inflated with sterile water. The sutures dissolve and the outer 'button' falls off between 2-6 weeks.

The nutrition nurses will see you four hours later to check the area and advise when the tube is safe to use. Arrangements will be made for training on care and management of your tube before you go home.

Preparation for your procedure

A couple of days before the procedure please arrange to visit your GP for blood tests to check that you are not at increased risk of bleeding.

You need to be admitted as an inpatient for 2 days, so please bring an overnight bag, you will be asked to arrive on the ward at 8.30am, the morning of your procedure. You can request a sedative beforehand to relieve anxiety if required. You will be asked to put on a hospital gown. You should not eat from midnight prior to the procedure. You may drink a little water.

Please note:

If you have any allergies or you have previously reacted to intravenous contrast, you must let the doctor know. If you are diabetic, please contact the **Medical Imaging Department on 01392 402336 selecting option 2, in-patient enquiries and then option 8 for the radiology nurses.**

If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) such as:

warfarin / clopidogrel / aspirin / non-steroidal anti-inflammatory drugs (NSAIDS) (eg brufen / ibuprofen / nurofen) / **dabigatran** (Pradaxa) / **rivaroxiban** (Xarelto) / **Apixaban** (Eliquis) / **phendione / acenocoumarol** – then these may need to be stopped or altered.

Please seek the advice of your hospital consultant, ask your GP, or contact the Medical Imaging Department on the number above.

After discussion with your GP or referring consultant, and if it agreed you can safely stop these medications, it is recommended that:

- Warfarin is stopped 6 days prior to your procedure.
- Aspirin is stopped 7 days prior to your procedure.
- Clopidogrel is stopped 7 days prior to your procedure.
- NSAIDS are stopped 2 days prior to your procedure.

- Rivaroxaban (Xarelto) and Apixaban (Eliquis) are stopped 2 days before your procedure.
- If you are taking Dabigatran (Pradaxa) please consult your doctor or contact the Medical Imaging Department on **01392 402336** selecting option 2, in-patient enquiries and then option 8 for the radiology nurses.

How long will I need a RIG tube?

RIG feeding tubes generally need to be replaced every three months. Your clinical nurse specialist will be able to remove/replace the tube in an outpatient setting. A RIG tube can be removed if or when it is no longer needed. Your dietitian will be able to advise you if they think you no longer need the RIG tube.

How will I use my RIG tube for feeding?

There are three possible options; your dietitian will help you decide the most suitable method for you.

- **Pump feeding** – The bag or bottle of liquid feed is hung on a drip stand and a pump is used at a set rate per hour. Typically, this can range from 10-20 hours per day.
- **Bolus feeding** – Liquid feed administered using a syringe to provide a set volume of feed at regular intervals during the day. To meet your full nutritional needs you may require up to 4-6 bolus feeds each day.
- **Gravity feeding** – Liquid feed poured into a container and left to run through using gravity. The time this takes will depend on the thickness of your feed and how high the container is held. This will also require multiple feeds to meet full requirements.

Will having a RIG tube change my life at home?

Having a RIG should not significantly impact your normal activity but may require changes to your usual routines. It is not recommended to immerse yourself in water for four weeks after your tube

is placed, showering is fine. Remember this is only short term. Activities like gardening and yoga where you are stretching and bending may be uncomfortable for the first couple of weeks after your tube is placed. Listen to your body and do what activities you feel comfortable with.

Who supplies the feed and equipment?

Depending on your local area, you will either get your feed from your local pharmacy or the Homecare Company will deliver directly to your home. Syringes may come from the company or via your District/Community Nurse team, dependant on your locality.

How will I take my medication?

Some medication can be prescribed in a liquid form or tablets can be crushed and administered via the tube with a syringe. Your pharmacist can advise you about this. The tube must always be flushed with at least 40-60ml of water before and after administration of drugs to prevent the tube blocking and at least 10ml in between each drug.

Will a RIG tube affect my bowels?

If you are having trouble with your bowels, there can be a number of reasons for this, including weakened muscles, reduced fibre intake, poor fluid intake or medication. Your bowels may need to adjust to the new feed, and your Dietitian may advise on fibre, non-fibre, fluid or a specialist feed dependant on your needs.

How will I care for the tube?

- **Flushing** - The tube should be flushed regularly with 40-60mls of freshly run tap water. When using your tube for feed or medication additional flushes will be required to prevent tube blockage.
- **Cleaning** - Your tube and RIG site will need cleaning once a day to protect your skin and the longevity of your feeding tube.

- **Balloon exchange** - The water in the balloon (holding the tube in place and stops it from falling out) will need to be replenished weekly to its optimum volume to prevent tube displacement.

You will receive further training and an aftercare booklet from your Nutrition Nurse when you are on the ward outlining the day to day care in more detail.

What will happen if I choose not to have a RIG?

You may have been advised to have a RIG tube inserted due to present or expected difficulties with eating and drinking. If you choose not to have a RIG inserted, your doctor and dietitian can advise on whether an alternative method of tube feeding could be an option for you.

For questions and queries about information you have been given about your RIG placement, please contact:

Medical imaging department **01392 402336**
Hospital Dietitians **01392 402044**
Community Dietitians **01392 403555**
Nutrition Nurse **01392 404635**

cancelling your appointment

If you are unable to attend your appointment, we would be grateful if you could contact us on **01392 402336 selecting option one**, as soon as possible. We can then offer your original appointment to another patient. A further date and time will then be arranged for you. Please be advised that if you fail to attend your appointment, it may be necessary to remove you from the radiology waiting list.

Please note: If you have had D&V (diarrhoea and vomiting) you will need to contact us to rebook your appointment unless you have been clear of symptoms for 48 hours.

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