



Department of radiology
Department of nutrition and dietetics

Gastrostomy tube insertion

Introduction

This leaflet tells you about the procedure known as gastrostomy tube insertion. It explains what is involved and what the risks and benefits are. It may make you think of things you would like to discuss with your doctor.

Why do I need a gastrostomy tube insertion?

The medical team caring for you is concerned that you may not be receiving adequate nutrition. This may be due to either:

- you are having difficulty swallowing at the moment
- you are likely to develop swallowing problems as a result of the treatment
- you are unable to tolerate your naso-gastric tube (tube through the nose into the stomach).

To make sure you can get adequate nutrition the medical team has referred you for insertion of a gastrostomy tube. This means you can be fed directly into your stomach. It is a safe and effective way of feeding and can easily be removed when no longer needed.

What to tell the doctor

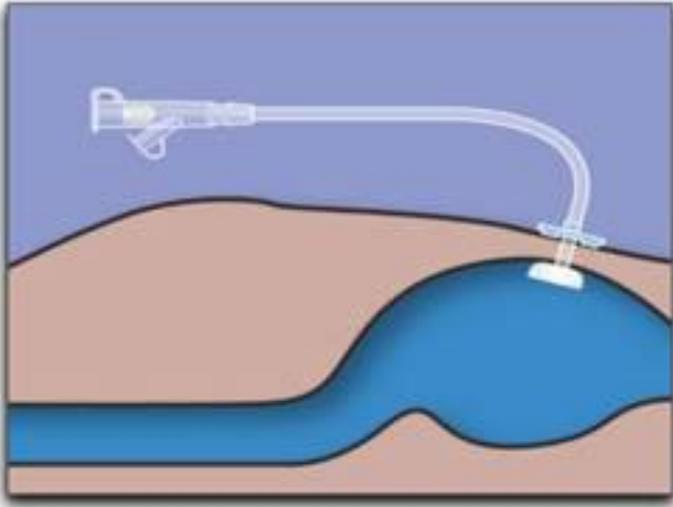
- If you have any allergies.
- If you have had a previous reaction to intravenous contrast medium (the dye used for some x-rays and CT scanning).
- It is important to tell the doctor or the radiology department **before attending for admission**
- If you are taking medication to prevent blood clots. Below is a list of some of the medications which are used to thin the blood and help to prevent blood clots.

If you are currently taking any of these medications, please contact your referring doctor or the Radiology department on 0161 446 3325 as soon as possible, as these may need to be stopped prior to your procedure. Failure to do so may result in your procedure being postponed.

| | |
|-------------|-------------|
| Apixaban | Dalteparin |
| Aspirin | Enoxaparin |
| Clexane | Fragmin |
| Clopidogrel | Rivaroxaban |
| Dabigatran | Warfarin |

What is a gastrostomy tube?

A gastrostomy tube (sometimes called a PEG / PIG / RIG or G-tube) is a small feeding tube usually made of a soft plastic. It is inserted directly into your stomach through the skin. It is held in place in the stomach by a small disc or a balloon filled with water.



How is the tube inserted?

There are different kinds of tube that we may use, inserted in different ways.

Radiological inserted gastrostomy (RIG)

The ward staff will insert a naso-gastric tube before the procedure. The ward staff will then give you some barium (X-ray dye) down the tube so the doctor can see the outline of your bowel during the RIG insertion. The procedure is carried out in the radiology (X-ray) department. At the start of the procedure we will give you a sedative and painkilling injection to make you sleepy and relaxed before insertion. We will record your pulse, blood pressure and oxygen levels throughout. We will also give you oxygen via a small plastic tube into your nose.

The doctor will use your naso-gastric tube to inflate your stomach with air. This makes it easier to place the tube into your stomach. The doctor will then inject a local anaesthetic into the skin on your abdomen where the tube will be placed.

The doctor will make three small cuts on your skin to place sutures (stitches), called gastropexies, directly into your stomach. The sutures help to keep the stomach near to the skin until everything heals. They are soluble and will dissolve causing the small button used to secure them to fall off after 3-6 weeks. A fourth cut will be made to insert the feeding tube. The doctor will then use x-ray screening to place the feeding tube. The naso-gastric tube is removed at the end of the procedure.

Per-oral image-guided gastrostomy (PIG)

Occasionally you may have a different type of tube. This tube is inserted using a slightly different technique which does not need sutures. During the procedure the tube will be passed through your mouth. To make this comfortable for you, the nurse will spray your throat with a local anaesthetic. The doctor will select the type of gastrostomy best suited to your medical condition.

Will it hurt?

The local anaesthetic injected into your skin does sting for a short time. The gastrostomy site will be painful for a few days but we will give you regular painkillers. Any pain usually improves when the sutures are taken out.

What will the tube look like?

Bumper type tubes (PIG)



Balloon type tube with gastropexy sutures (RIG)



Are there any risks involved?

There are a few risks involved as with any procedure.

- Sedation: occasionally this may cause your blood pressure and blood oxygen levels to become low. We will give you oxygen during the procedure and monitor your blood pressure until you are fully awake.
- Infection: you may have an infection of the skin at the insertion site. To try to prevent this, we will give you an antibiotic injection before the tube is inserted. If the site becomes infected later, we can treat this with antibiotics.
- Bleeding: this can happen during the tube insertion. To reduce the risk we will take a blood sample the day before the procedure to check that your blood clots properly.
- Perforation (a hole) of the bowel: this can occur when the needle is passed through the skin. This is a rare complication but may need special treatment or an operation.
- Occasionally we are unable to place the tube. If this happens your doctor will explain why and discuss any other options with you.

The doctor or specialist nurse will visit you the day before the procedure to discuss these risks with you and give you the opportunity to ask questions before you sign a consent form.

We may also invite you to take part in research studies. Any study will be explained thoroughly at the time.

Agreeing to treatment: consent

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you. Your consent may be withdrawn at any time before or during this treatment. Should you decide to

withdraw your consent then a member of your treating team will discuss the possible consequences with you.

What happens on the day of admission?

On your ward

- You should be admitted one day before the procedure. You can eat or drink normally on the day of admission. However, your stomach must be empty for the procedure. This means you must not have anything to eat for 6 hours before the procedure. (This includes any feeds you may be having down your naso-gastric tube). You may have water until 2 hours before the procedure. You will be advised about this when you are on the ward.
- You will have blood taken to check that it clots properly.
- You can continue to take your other usual medications.
- The ward staff will insert a naso-gastric tube and give you some barium (x-ray dye) down the tube. Alternatively, if you can swallow you will be able to drink the barium which is used to outline your bowel during the procedure.
- You will have a cannula (small plastic tube) inserted into a vein in your arm. This will be used to give sedation.

What happens on the day of the procedure?

In the radiology department

- A nurse will check that you understand what is going to happen and that you have signed a consent form and are happy for the procedure to go ahead.
- You need to remove any dentures.
- You may have local anaesthetic sprayed onto your throat to numb it.
- We will ask you to lie down either on your back or left side.
- You will have oxygen through a small plastic tube into your nose.
- We will connect you to monitors to check your blood pressure, pulse and oxygen levels.
- Your nurse will give you an injection to make you sleepy and relaxed.
- The procedure usually takes 15 to 20 minutes.

After the procedure

- You will stay in the recovery area until your pulse and blood pressure are stable then return to your ward.
- You may be drowsy for most of the day.
- You may have some pain around the tube site for a few days. Your nurse will be able to give you some painkillers to relieve this.
- You will not be allowed to eat or drink for 6 hours.

How and when will feeding start?

- 6 hours after tube insertion your tube will be flushed with water. If there are no problems you will then be allowed to eat and, if needed, tube feeding will start the same day.
- If you are eating well at present with no weight loss you will not need to use your gastrostomy tube for feeding at this stage of your treatment. The following day you will be shown how to care for the tube including giving regular flushes at home with cool boiled water. This will help keep your tube clear. You will be referred on to your local community

dietitians who will monitor your nutritional progress and advise you regarding the introduction of feed.

- If you have lost weight and are struggling with your diet or fluids, you will need to use your gastrostomy tube for feeding. You will be seen by a dietitian on the ward who will carry out a full nutritional assessment. There are a number of different feeding options available which will be discussed in the next section. These will be discussed with you so a feeding plan can then be devised that suits your lifestyle as best as possible. Any diet or fluids that you are managing will also be taken into account.

Feeding

Feed can either be given by a pump or a syringe. The feeding method chosen will depend on your preference and your dietitian will discuss both options with you.

- To start with feed is usually given slowly via a pump which can give small doses over a set number of hours. This will give your body time to adjust to the feed. The speed and amount of food given will be increased gradually by your dietitian until your nutritional needs are met. Usually the feed will be given overnight once home but can be given during the day if you prefer.
- Feed can also be given directly through your tube into your stomach using a syringe at set times during the day.
- Your ward dietitian will visit you regularly to ensure you are having no problems with the feed.
- To prevent heartburn or severe reflux, it is important that you sit up or are well supported by pillows whilst you are having your feed.

Going home on feed

Before you are discharged your dietitian will make sure you are having no problems with your feed and you/your carers must be able to look after both your feeding tube and carry out the chosen method of feeding safely. In addition to this your blood results must also be stable. This usually takes a minimum of five working days; however it may take longer if you develop complications.

What about medication?

Where possible your pharmacist will give you all your medications in liquid form so as not to block the tube. If this is not possible and you need tablets, we will give you instructions on how best to manage them.

Medicines are given down the tube by using a large purple syringe.

You must first flush the tube with at least 50mls of water, insert the medicine into the tube, then flush again with another 50mls of water. This must be done separately for every medication given. You must not mix medications when putting them down your tube.

Who cares for the tube?

Your ward nurses and the specialist nutrition support nurse will teach you or your carer how to care for the tube before you leave hospital. They will show you how to connect the feeds, clean the skin around the tube and check the position of the tube. You will be given a home

enteral feed (feed via your tube) training pack to use whilst training which you can also take home.

General hygiene

You must always wash your hands before handling your tube or feeding equipment.

Bathing and washing

Once the wound has healed you will be able to bathe or shower as normal. The tube end must be closed and you must dry the area thoroughly.

Mouth care

When you are unable to eat it is very important to keep your mouth clean and moist. You should clean your teeth regularly and use a mouthwash. If your mouth is dry due to your chemotherapy or radiotherapy we will give you special mouth-care instructions.

Who will be available to help with problems?

Your home enteral feed training pack will explain some of the problems you may experience and how to cope with them.

We will also give you contact numbers for help and advice.

If you notice any redness, pain or discharge from the site once you leave hospital, your district nurse will be able to give you advice.

Others who may be involved in your care:

- **Drop-in clinic** open between 8.30am and 4.00pm, Monday to Friday in Radiology 2 (Dept. 34) at The Christie. Call in or contact the department on **0161 446 3322** if you are concerned about your tube being blocked or infected.
- **A specialist nutrition nurse at The Christie 0161 446 3729** will be available for advice and will follow your progress once discharged.
- **Your community dietitian** will provide advice with feed or tube-related problems and change your feeding plan if necessary.
- **Your community nutrition nurse** (NB not available in all areas) will give you support and advice about tube and pump care.
- **Your district nurse** will help with skin or tube-related problems.
- **The feed supply company** will arrange orders and delivery of feed and deal with pump-related problems.
- **Your feed company nurse** (who gave you your pump training) will give you support and advice about tube and pump care.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

Contact The Christie Hotline for
urgent support and specialist advice

**The Christie Hotline:
0161 446 3658**

Open 24 hours a day, 7 days a week

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact **patient.information@christie.nhs.uk**

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For more information about The Christie and our services, please visit **www.christie.nhs.uk** or visit the cancer information centres at Withington, Oldham or Salford.

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