

Patient Information Undergoing Radiology Inserted Gastrostomy

Department of Radiology

Introduction

This leaflet tells you about the procedure known as Radiologically Inserted Gastrostomy. It explains what is involved and what the possible risks are. It is not meant to replace an informed discussion between you and your doctor but it can serve as a starting point for such a discussion.

If you are having the procedure performed as a pre-planned operation, then you should have plenty of time to discuss the situation with your consultant who will be doing the procedure and perhaps even your own GP. **You should have had sufficient explanation before you sign the consent form.**

What is a Radiologically Inserted Gastrostomy?

A radiologically Inserted gastrostomy is a technique whereby a narrow plastic tube is placed through the skin, directly into your stomach. Once in place the tube can be used to give you liquid feed directly into your stomach, to provide nutrition.

Radiologically means it is done under X-ray guidance.

Gastrostomy means making a small opening into your stomach.

Why do I need a Radiologically Inserted Gastrostomy?

There are several reasons why you may not be able to eat normally at the present time. There may be a blockage at the back of your throat or in your gullet (oesophagus), and this is preventing food going down normally. It may be that you have had a stroke, and that this is causing you problems with swallowing, or your gullet may not be working properly for other reasons.

You may have been fed through a small plastic tube inserted through your nose, down into your stomach (known as a nasogastric tube).

However, a nasogastric tube is not suitable for providing long term nutrition, and therefore a radiologically inserted gastrostomy is necessary.

Who has made the decision?

The doctors in charge of your case and the radiologist doing the Radiologically Inserted Gastrostomy will have discussed the situation and feel that this is the best option.

However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors you do not want the procedure carried out, then you can decide against it.

Where will the procedure take place?

The procedure is carried out in the X-ray department, in a special "screening" room, adapted for this sort of specialised procedure.

Who will be inserting the Radiologically Inserted Gastrostomy?

A specially trained doctor called a Radiologist will perform the procedure.

Radiologists have special expertise in using X-ray and scanning equipment and also in interpreting the images produced. They need to look at these images whilst carrying out the procedure.

How do I prepare for Radiologically Inserted Gastrostomy?

You need to be an in-patient in the hospital, and you will be asked to put on a hospital gown. You may receive a sedative to relieve anxiety, and you will be given an antibiotic beforehand. If you have any allergies you must let your doctor know. If you have ever reacted to intravenous contrast medium, the dye used in X-ray departments for kidney X-rays and CT scanning; you must also tell your doctor about this.

The night before the procedure we require you to drink 50ml of Gastromiro - an X-ray dye. This is so that we can see the loop of bowel nearest your stomach when we do the procedure.

On the morning of the procedure a doctor will pass a nasogastric tube through your nose and into your stomach - if not already present. You also need to have a needle put into a vein in your arm so that you can

be given antibiotics and if the radiologist needs to give you a sedative or painkillers.

What actually happens during a Radiologically Inserted Gastrostomy?

You will lie on the X-ray table, flat on your back. Once in place this needle will not cause any pain. You will have a monitoring device attached to your finger and will possibly receive oxygen through a small tube in your nose. You may also have a monitoring device attached to your chest.

The Radiologist will keep everything as sterile as possible and will wear a theatre gown and operating gloves. The skin below your ribs will be cleaned with antiseptic and most of the rest of your body covered with a theatre towel.

Air will be put into your stomach through the nasogastric tube in your nose. This will move the stomach closer to the abdominal wall. The radiologist will use the X-ray equipment or an ultrasound machine 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 with local anaesthetic. This can sting a little to start with, but rapidly wears off. You will now be given an injection of Buscopan – this prevents spasm.

Now, some air will be put in via the nasogastric tube to extend your stomach. The radiologist will then pass a thin, hollow needle into your stomach using X-rays or ultrasound as a guide. Once the needle is in your stomach, some more air will be put in, which makes room for a guide wire to be placed down through the needle into your stomach.

The needle is then removed, leaving the guide wire in place, and then a series of small tubes are passed over the wire, one after another, to enlarge the pathway from the skin into your stomach.

Once this pathway is wide enough, a tube (gastrostomy) can be put in through the skin and into your stomach over the guide wire. The guide wire is then removed. Now, the radiologist will secure the stomach to the muscles underneath the skin with stitches, to prevent the tube falling out. Once the gastrostomy has been inserted, the nasogastric tube can be removed.

Medication

The Radiologist will need to know all medication that you are taking, including anti-platelet drugs and anticoagulants. These are medicines that affect the way your blood clots. Listed below are some drugs that the doctor will need to be informed about if you have been prescribed them:-

Warfarin	Aspirin	Enoxaparin	Dalteparin
Clopidogrel	Tinzaparin	Bemiparin	Fondaparinux
Danaparoid	Rivaroxaban	Coumarins	Acenocoumarol
Phenindione	Lepirudin	Dibigatran	Bivalirudin
Argatroban			

Will it hurt?

Unfortunately, while the procedure is being done, it may hurt for a very short period of time, but any pain that you have will be controlled with painkillers.

When the local anaesthetic is injected it will sting to start with, but this soon wears off, and the skin and deeper tissues should then feel numb. Later you will be aware of the tubes being passed into your stomach, but this should just be a feeling of pressure and not pain.

There will be a nurse standing next to you and looking after you. If the procedure does become painful for you then they will be able to arrange for you to have more painkillers through the needle in your arm.

Generally, placing the catheter in the stomach takes only a short time and once in place it should not hurt at all.

How long will it take?

Every patient's situation is different and it is not always easy to predict how complex or how straightforward the procedure will be.

It may be over in 30 minutes but occasionally it can take as long as 90 minutes. As a guide, expect to be in the X-ray department for about an hour and a half altogether.

What happens afterwards?

You will be taken back to your ward on a trolley. Nurses on the ward will carry out routine observations, such as taking your pulse and blood pressure, to make sure that there are no problems.

If you have been up and about previously, then you will generally need to stay in bed for a few hours afterwards, until you have recovered.

You will have to be nil by mouth. The tube cannot be used for 12 hours. After this time you will have water given through the tube for the next 6 hours.

You will not be allowed to eat or drink until the water has finished going through the gastrostomy. If you have been fed via a nasogastric tube prior to the gastrostomy insertion, then the feed will be restarted once the water has finished.

The dietician will assess if you need to use the gastrostomy for feeding when you come into hospital. If you are eating and drinking normally when your gastrostomy is placed then it is usual that you go home within 3 days, as long as there are no complications. You must flush the gastrostomy daily with water even if you are not using it for feeding. A special nurse will train you and your family or carers about how to care for the gastrostomy before you go home.

If your gastrostomy is needed to provide feed and fluid straight away you will be expected to stay in hospital for a few extra days. This extra time will allow us to make sure the correct feed is given and ensure that you, your family or your carer is properly trained to use and care for your gastrostomy.

How long will the tube stay in and what happens next?

This is a question, which can only be answered by the Doctors and Dietician looking after you. It all depends on why you needed the tube in the first place. You do need to discuss this fully with your consultant.

The tube needs to stay in place until you can eat and drink normally, and in some cases this might not be for a very long time.

The tubes generally last 3-6 months and may need to be changed. The first change will take place in Radiology, but any further changes will be done by your District Nurse.

You will have a specially trained Dietician looking after you, and they will discuss the different methods of feeding through the tube with you, to ensure the feeding plan suits you.

The stitches holding your tube in place are dissolvable and will generally fall off within 2-5 weeks of placement. Two weeks after the gastrostomy has been inserted, the water inside the balloon will be checked. This will be done by the District Nurses and will need to be checked on a weekly basis.

Are there any risks or complications?

Radiologically Inserted Gastrostomy is a very safe procedure. However, there are some risks and complications that can arise, as with any medical treatment. The biggest problem could be not being able to get the tube into your stomach. This can sometimes happen. If this happens you may need an operation to place the tube.

Sometimes there is a leak around the tube. This can lead to the skin around the tube becoming very red and sore. An attempt will be made to treat this but it may become necessary to remove the tube for healing to occur. You need to keep the area around the tube very clean and dry.

Very rarely a blood vessel can be punctured accidentally when passing the needle into the stomach. This can result in bleeding. This may stop by itself, or if not, you may need a blood transfusion. Occasionally it may require another procedure to block the bleeding artery. This would be done by a Radiologist using a fine plastic tube put into the artery.

Very rarely, it may need an operation to stop the bleeding. However, **this is a very rare complication.**

It is also very rare but possible that infection causing damage to the bowel occurs, leading to an emergency operation.

Further Information

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure, before you sign the consent form.

Radiologically Inserted Gastrostomy is considered a very safe procedure, designed to save you having a larger operation.

There are some slight risks and possible complications involved, and although it is difficult to say exactly how often these occur, they are generally minor and do not happen very often.

For further information contact:-

Interventional Radiology Department:- 01633 493441

This leaflet has been prepared by the British Society of Interventional Radiology (BSIR) and the Clinical Radiology Patients' Liaison Group (CRPLG) of the Royal College of Radiologists.

**“This document is available in Welsh /
Mae’r ddogfen hon ar gael yn Gymraeg”.**