Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Undergoing a Radiologically Inserted Gastrostomy (RIG)

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Patient Information

Interventional Radiology Department

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Introduction

This leaflet tells you about the procedure known as Radiologically Guided Gastrostomy (RIG). It explains what is involved and what the possible risks are. It is not meant to be a substitute for an informed discussion between you and your doctor but can act as a starting point for such a discussion.

This procedure will be performed in the X-ray Department. The X-ray Department is also known as the Radiology or Imaging Department. It is the facility in the hospital where radiological examinations of patients are carried out. These examinations use a range of imaging equipment, such as a Computed Tomography (CT) scanner, an ultrasound machine, or a Magnetic Resonance (MR) Imaging scanner.

Radiologists are doctors specially trained to interpret images, they can also carry out more complex examinations. Radiologists are supported by Radiographers, who are trained to take X-rays and perform other imaging procedures, and Radiology Nurses, who are trained to care for patients having radiological procedures.

What is a RIG?

A gastrostomy is a narrow tube that is placed through the skin into your stomach. Once in place, the tube will be used to give you liquid food directly into your stomach to provide nutrition.

Gastrostomy tubes can be placed either in X-ray (RIG) or Endoscopy (percutaneous endoscopic gastrostomy (PEG)).

Why do I need a RIG?

You may be unable to eat or drink sufficient amounts to satisfy your nutritional needs, or there may be a problem with swallowing that makes it unsafe for you to eat or drink normally.

There are several reasons for this that will have been discussed with you.

You may have had a small plastic tube inserted through your nose, known as a nasogastric (NG) tube, down into your stomach, to help with your feeding. Unfortunately, this can only be left in place for a relatively short period of time. Obviously, if you do not receive enough nutrition, you will become very ill.

Who has made the decision?

The Consultant in charge of your care and the Radiologist will have discussed your situation and feel that a RIG is the best treatment option. However, you will also have the opportunity for your opinion to be considered and if, after a discussion with your doctor, you do not want the gastrostomy inserted, you can decide against it.

Where will the procedure take place?

It will take place in the X-ray Department, in a room that is adapted for these types of specialist procedures.

Who will be performing the RIG?

An Interventional Radiologist will do the procedure. These Radiologists have special expertise in using specialist equipment and performing these types of procedure. The Radiologist will use the images to conduct the procedure.

How do I prepare for the RIG?

A RIG is usually carried out under local anaesthetic, meaning that you will not be asleep.

However, pain killers and sedation are available should they be required.

You will be asked not to eat for at least four hours before the procedure.

You will be advised, if you are able, to continue taking your normal medication even on the morning of your admission, that is unless they belong to one of the groups of medication listed below:

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1. Antiplatelets (Aspirin / Clopidogrel).
2. Anticoagulants (Warfarin / Apixaban / Rivaroxaban / Edoxaban).
3. Diabetic medication (Insulin injections or Diabetic tablets such as Metformin).

You will be given advice about these medications when your appointment is arranged so it is important to let staff know if you are taking any of them when they ask. If you are unsure ask to speak to the Radiology Nurses.

If you are not an inpatient, you will be advised where to attend for admission, you can expect to be in hospital for at least one night.

Prior to attending for the procedure:

- You will be asked to put on a hospital gown.
- A cannula (a thin plastic tube) will be inserted into your vein so that the Radiologist can give you sedation or pain killers if needed.
- If you do not already have one inserted, a small tube will be placed through your nose into your stomach, called a nasogastric (NG) tube.

If you have any allergies, you MUST let the doctor / nurse know.

If you have previously reacted to intravenous contrast medium (dye used for certain X-rays and CT scans), you MUST also tell the doctor / nurse about this.

What happens during the procedure?

- The procedure is performed under sterile conditions and the Radiologist will wear a sterile gown and gloves to carry out the procedure.
- You will lie flat on your back; you can have pillows, but these are limited to 1 or 2.
- A Radiology Nurse will place stickers on your shoulders and connect you to an electrocardiogram (ECG) machine (heart monitor). Your blood pressure will be checked every ten minutes, and your pulse and oxygen levels will be continuously monitored throughout the procedure.
- The skin below your ribs will be cleaned with antiseptic and you will be covered with sterile drapes.
- Your stomach is filled with air via the NG tube. The Radiologist will use an ultrasound probe and X-rays to decide the best site for the RIG.
- The local anaesthetic will be injected into the skin to numb the area, and you will probably be given sedation via the cannula in arm.
- A small needle is placed into the stomach through which the feeding tube is placed. There are many different types of feeding tube available – some initially need stitches to keep them in place, others do not. The Radiologist will discuss this with you.

Will it hurt?

When the local anaesthetic is injected, it will sting for a short while, but this soon wears off. There may be a little discomfort during the procedure, but any pain that you have will be controlled with painkillers.

You may be aware of the tubes being passed into your stomach, but this should just be a feeling of pressure and not of pain.

How long will the procedure take?

Every patient is different, and it is not always easy to predict; however, expect to be in the Radiology Department for about an hour.

What happens after the procedure is finished?

You will be taken back to the ward.

Nursing staff will carry out routine observations including pulse and blood pressure, and will also check the procedure site.

You will stay in bed for a couple of hours.

The tube in your nose can be removed and the RIG can generally be used after a few hours. Your stomach may feel a little sore for a few days. If necessary, this can be controlled with painkillers.

Are there any risks or complications of the procedure?

RIG is a very safe procedure, but as with any medical procedure there are some risks and complications that can arise.

Occasionally, it is not possible to place the tube into your stomach. This may require a different method of placement or occasionally you may need an operation to place the tube.

Sometimes there is a leak around the tube. This is less likely to happen if the stomach has been attached to the muscles beneath the skin, but it can still sometimes occur. This can lead to the skin around the tube becoming very red, sore and painful (localised peritonitis). An attempt will be made to treat this, but it may become necessary to remove the tube to allow healing to occur or an operation may be needed to sew up the hole in your stomach.

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 it does not, you may need a blood transfusion. Occasionally you may require another procedure to block the bleeding artery or an operation to stop the bleeding. However, this is extremely rare.

How long will the tube be in?

This is a question that can only be answered by the doctors looking after you.

It depends on why you need the tube in the first place. You will need to discuss this with your consultant.

The tube needs to stay in place until you can eat and drink safely and normally. The length of time that the tube will remain in place is different for every person and will be regularly reviewed by your doctor and specialist nurse.

You will have a specially trained nurse looking after you who will show you how to look after the tube properly.

You will have 3 or 4 small plastic discs (gastropexies) that have been used to secure your stomach. These have disposable sutures attached to them and will fall off once the suture has dissolved. This takes between 10 and 14 days.

If your tube has stitches holding it in place, these will be removed by a nurse after about ten days. She will also check the gastropexies at this time.

The tube is kept in place by a small balloon. The nurse caring for you will show you how to care for this balloon.

The tube should stay in by itself although it is best covered with a light dressing, which the nurse looking after you can apply.

Safety

X-rays are a type of radiation. We are all exposed to natural background radiation every day; this comes from the sun, the food we eat, and the ground. Being exposed to X-rays carries a small risk, but your consultant feels that this risk is outweighed by the benefits of having this procedure. We take all safeguards to minimise the amount of X?rays you receive.

Information for patients between the ages of 12 and 55

The risks of radiation are slightly higher for an unborn child so you will be asked to confirm that you are not pregnant before the examination can proceed.

This applies to all patients whether you are male or female.

If there is a chance you may be pregnant, please let a member of staff know at the earliest opportunity or contact the Interventional Radiology Team on 01942 778713 (this is the direct phone number for Interventional Radiology where your procedure will be performed).

Finally

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.

Contact

The X-Ray Department can be contacted directly on (01942) 778713, or via the hospital switchboard on (01942) 244000 and ask for the X-Ray Department. The Interventional Radiology Department is open Monday to Friday 8.30am to 5pm.

Acknowledgements

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