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# Patient Information

Radiologically Inserted Gastrostomy (RIG)

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This booklet will explain to you the procedure that you are going to have, and the care required for your radiologically inserted gastrostomy (RIG) after it is placed.

## **What is a Radiologically Inserted Gastrostomy (RIG)?**



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A RIG is a narrow tube that is inserted through the abdominal wall into the stomach. The Radiologist uses X-rays to guide the tube into the correct position. Once in place, the tube can be used to give you liquid feed, fluid and medication. The RIG has a balloon at the tip, which is inflated with sterile water, to hold it in place in the stomach.

## **Why do I need a RIG?**

People have RIGs placed for many reasons. You may be able to safely swallow food and fluid, but you are not able to meet your full requirements and so additional food, in liquid form, is given via the RIG to ensure that you do not become malnourished and dehydrated. If you are unable to eat and drink anything, all your nutrition and hydration will be given via the RIG.

## **How long will I be in hospital?**

If you are an outpatient, you will normally be admitted to a ward the day before the procedure. If you are not going to be using the RIG for feed straight away, you should be able to go home the day after the procedure.

If you need to use the RIG for feed and medications immediately, you will need to stay in hospital a few days longer so that the feeding regimen can be established.

### **Where will the procedure take place?**

The procedure takes place in the X-ray department.

### **How long does the procedure take?**

The procedure takes between 30 and 60 minutes.

### **What are the risks and possible complications?**

Although this procedure is relatively safe and major complications are rare, there are potential risks that will be explained to you before you sign the consent form.

- Infection at the insertion site
- Bowel perforation and injury to solid organs
- Bleeding
- Inflammation/infection in the abdomen
- 1% risk of mortality
- Some patients experience pain following the RIG placement, which will be carefully monitored and treated

### **Important information and medication**

If you are an outpatient, the radiology department will contact you prior to the procedure to arrange a date for you to come in for an assessment. The following will be discussed/completed.

- If you are taking any blood thinning medication such as Rivaroxaban, Warfarin, Clopidogrel, Prasugrel or Dalteparin/Heparin injections
- If you have any allergies.
- If you previously reacted to an intravenous contrast; the dye used for CT scanning
- If you are diabetic
- Bloods may be taken.
- The Radiologist will explain the procedure and ask you to sign a consent form.

### **What happens when you arrive on the ward?**

- On arrival, a member of the medical team or the nutrition nurse will discuss the procedure with you.
- Some blood tests may be taken.
- You may also be asked to drink a special preparation the night before the procedure. This drink contains contrast, which helps the radiologist visualise the bowel.
- You will be referred to the dietitian.

## **What happens before the procedure?**

- **You should not eat or drink for 6 hours** before the procedure.
- A cannula will be placed into a vein in your arm so that you can be given intravenous fluids and medication.
- A thin tube called a nasogastric tube will be inserted through your nose, into your stomach. This tube will stay in your stomach for the duration of the RIG procedure and will be taken out at the end. The tube is used to inflate your stomach with air to make it visible on X-ray before the RIG is placed.

## **What happens during the RIG procedure?**

- In the X-ray room, the staff will check your details and go through a pre-procedure checklist. You will then be asked to lie flat on the X-ray table and monitoring equipment will be attached to you so that your blood pressure and heart rate can be checked during the procedure.
- Before the Radiologist starts the procedure, you may be given some sedative medication and painkillers.
- The skin below your ribs will be cleaned with antiseptic and the rest of your body will be covered with sterile drapes.
- Using the nasogastric tube, the radiologist will inflate the stomach with air and then use X-rays to choose the most suitable place for inserting the RIG.
- The skin in this area will then be numbed with local anaesthetic.
- Two small buttons with sutures are then placed to hold the stomach close to the wall of the abdomen. These buttons on the surface of the abdomen will fall off after around 4 weeks.
- The radiologist will then create a pathway for the RIG to be placed into your stomach.
- The RIG is held in place in the stomach by an internal balloon, which is inflated with sterile water.
- A dressing is applied, and you will be transferred back to the ward.

## **What happens after the procedure?**

- Do not eat or drink anything for 4 hours after the procedure and remain on bed rest for 4 hours.
- You will be given fluids through the cannula to prevent you from getting dehydrated.
- The ward nurses will monitor your observations such as blood pressure and heart rate and ask if you have pain at regular intervals. When the RIG is first placed, it can feel uncomfortable and so you may require regular pain relief which will be prescribed.
- Nothing should be put through the RIG for 4 hours after the procedure.

- After **4 hours**, the nurses will commence an infusion of water, which will run for 6 hours.
- If there have been **no** complications with the water infusion, enteral feeding and medication can be given via the RIG the following day from 8am.

### **Starting to feed through the RIG**

If you need to start feeding through the RIG straight away, the dietitian will see you the day after placement to prescribe a feeding regimen. There are two ways of feeding:

- Using a pump to deliver the liquid feed slowly throughout the day
- Bolus feeding- liquid feed is drawn up into a purple ENFit 60ml syringe and then slowly given directly into the RIG.

The dietitian will help you to decide the most suitable method for you. You will need to stay in hospital until the feeding regimen has been established and training on how to give the feed has been provided to you and/or your carer/s.

### **If I do not need to use the RIG straight away for feed, do I need to do anything with the tube?**

Yes, the RIG will need to be flushed twice daily with 50mls of water to keep the tube clear. The nutrition nurse or the ward nurses will show you how to do this before you go home.

### **Before discharge from hospital, you should be provided with the following.**

- 10 packets of sterile gauze and 10 sachets of normasol for cleaning around the RIG for the first 10 days.
- Tape for securing the tube to the abdominal wall.
- 6 x 5ml luer lock syringes and 3 x 10ml vials of sterile water for the balloon.
- 14 days' supply of feed and the equipment required to give the feed.

### **Following discharge**

If you are discharged within 24 hours of having sedation do not:

- Drive a car or ride a bike
- Drink alcohol
- Operate any machinery or do anything requiring skill or judgement
- Make important decisions or sign documents

## **Important Notice:**

If you are discharged within 72 hours of having your RIG placed and you notice any of the following symptoms, DO NOT PUT anything through the RIG and contact Ward 22 on **01908 996455/996454** or come directly to the Accident and Emergency Department:

- Leakage of fluid around the RIG tube.
- Pain on feeding or flushing with water (stop the feed).
- Prolonged or severe pain with possible abdominal bloating.
- New bleeding from the RIG site.

## **Looking after your RIG at home**

- Sutures/buttons- The sutures that hold the buttons in place will eventually dissolve. After two to five weeks, the buttons will fall off. This is completely normal. If the buttons have not fallen off after six weeks, your doctor or nurse can cut the sutures.
- For the first 10 days, clean underneath the circular fixation plate and around the RIG stoma with normal saline and sterile gauze. After 10 days, you can clean with mild soapy water and dry well. Dressings around the tube are not required.
- It is advisable to tape the end of the RIG to your abdomen to prevent it from pulling.
- You can take a shower after 48 hours but do not take a bath for two weeks or until the site has healed.
- To prevent your RIG from blocking it is very important that you flush it with at least 30-60mls of water before and after feed and medications. You can use tap water to flush your RIG unless you are receiving chemotherapy, in which case you should use boiled and cooled water.

## **Changing the water in the balloon**

The RIG is held in the stomach by a balloon that is inflated with sterile water. The water within the balloon needs to be checked and changed every 7 days. If you are in hospital when this is due the nutrition nurse or the ward nurse will complete this for you. If you are at home the Abbott Nutrition Nurse will visit to train and support you, or your carer/s with this.

## **Medication**

If possible, medications should be taken orally. If you cannot take medication orally then your tablets can be crushed and mixed with water before giving them through the RIG. It is important that the medications are given separately and not mixed. Always flush the RIG with at least 30mls of water in between each medication.

Note: Not all medications are suitable for putting through the RIG. Some tablets are available as a liquid, which is easier to give through the RIG. If you are unsure, please discuss with your GP or pharmacist.

### **What do I do if the RIG blocks?**

If you are unable to flush the tube, you may try the following:

- Ensure all clamps are open and the tube is not kinked.
- Put 30mls of water into a 50ml purple ENFit syringe and try to clear the tube using a gentle push/pull technique on the syringe.
- If this does not work, try using warm water. Do not use fizzy drinks.
- If the blockage still does not clear, contact your Abbott nutrition nurse.
- Out of hours, please come to the Accident and Emergency department.
- Never use a sharp instrument or excessive force to clear the blockage.

### **What do I do if the RIG falls out?**

The community dietitian will order you a spare RIG to keep at home in case your tube falls out or needs changing. If your RIG falls out it is essential that you go straight to the Accident and Emergency department with the spare RIG. If you delay going the tract between your stomach and the abdominal wall may close.

### **How long will the RIG last and will it need replacing?**

The RIG will need replacing every 3 months. The first tube change will take place in the X-ray department and then after this your RIG can be changed in your home by the Abbott Nutrition Nurse.

### **Useful contact numbers:**

Radiology department: 01908 995672

Ward 22: 01908 996455/996454

Community dietitian: 01908 995416

Abbott Nutrition Nurse: 07824483335

Nutrition Nurses MKUH: 01908 660033/ Teams extension 87397/8

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