Radiology Department

King's College Hospital
NHS Foundation Trust

Radiologically inserted gastrostomy (RIG) – image guided

Information for patients

This leaflet explains radiologically inserted gastrostomy (RIG). It covers what to expect on the day of the procedure, as well as the benefits, the possible risks and the alternatives.

Before RIG, a clinical staff member will explain the procedure to you in detail. This leaflet is not meant to replace that discussion. If you have any questions or concerns, please do not hesitate to speak to the doctor who has referred you to the Interventional Radiology Department. It is important that you feel well informed before agreeing to the procedure and signing the consent form.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you to confirm your name and date of birth and check your ID band. If you do not have an ID band, we will ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

What is a radiologically inserted gastrostomy (RIG)?

It is a procedure that allows us put a tube into your stomach so we can give you liquid food, fluid and medication.

The doctor puts a thin plastic tube – the RIG – through the wall of your tummy and into your stomach using x-ray images to guide it into the correct position. The tube has a balloon at its tip, which is inflated with sterile water to hold it in place in your stomach. Once the tube is placed, a short length of it will sit on your skin, outside of your stomach and underneath your clothes.

Why do I need a RIG?

You may need a RIG because:

- you are not getting enough nutrition from the food and drink that you consume. You need to be given liquid food through the RIG to ensure that you do not become malnourished and dehydrated
- you are unable to eat and drink anything, so need all your nutrition and hydration through the RIG.

What are the risks?

This is a relatively safe procedure and major complications are rare. But there are some potential risks that will be explained to you before you sign the consent form.

- **Infection at the site where the tube is put in.**
- **Bowel perforation and injury to other organs:** there is a very low risk of a hole being made in your bowel or other organs being damaged.
- **Bleeding.**
- **Inflammation/infection in your abdomen**
- **Death:** 1% (1 in 100) risk
- **Pain once the RIG is in place:** Some patients have pain once the RIG has been put in. If this happens, we will monitor you carefully and treat the pain.
- **Radiation:** Your doctor will use x-rays to ensure they can carry out your procedure safely. X-rays are a type of ionising radiation. Your exposure to radiation from this procedure is low and any potential increased risk of developing cancer later in life is slight. The doctors treating you believe that the benefit of the procedure outweighs the risk from the exposure to radiation and they will ensure that your radiation exposure is kept as low as possible. If you have any concerns about this, please discuss it during the consent process with the specialist doctor who will carry out your procedure.
- **Pregnancy:** Please tell us before your procedure if you think you may be pregnant.

What are the benefits?

Being fed through a RIG means you will get enough nourishment and fluids each day. For some, it is the safest and most comfortable way of feeding. Having a RIG tube also enables you to given some medications.

Are there any alternatives?

Your doctor will be happy to discuss these options with you.

Where will I have the procedure?

You will have the procedure at one of the two places:

- Interventional Radiology Department, 1st Floor, Denmark Wing, King's College Hospital (KCH), Denmark Hill; or
- Interventional Radiology Department, 1st Floor, South Wing, Princess Royal University Hospital (PRUH).

How can I prepare for my procedure?

The doctor or medical staff who referred you to have the procedure will explain it to you before you are admitted to hospital.

Drugs and alcohol: Do not use any recreational drugs or drink alcohol for 24 hours before the procedure.

Medications: Please make sure the doctor or nurse knows if you are taking any of the following blood-thinning medications (anticoagulants or antiplatelets): aspirin, clopidogrel, warfarin, apixaban, rivaroxaban, edoxaban, ticagrelor, prasugrel, phenprocoumon, acenocoumarol, dagibatran, argatroban, heparins, fondaparinux, enoxaparin.

You usually need to stop taking these medications a few days to a week before the RIG insertion. But do not stop them on your own without talking to your doctor first. They will tell you when to stop and when it is safe to start taking them again.

If in doubt, please bring with you all the medications you are taking, whether they have been prescribed for you or if you have bought them over the counter at your local chemist.

Will I be admitted to hospital for the procedure?

You will be admitted to the hospital the day before your procedure and stay overnight afterwards. Rarely, you may be admitted on the morning of your procedure. Our bed manager will call you to let you know when to arrive and which ward to go to.

If you are not going to be using the RIG for feeding straight away, you should be able to go home the day after the procedure. If you need to use the RIG for feeding and medications immediately, you will need to stay in hospital for a few days so we can set up a feeding plan for you.

What to bring with you: Please bring a small overnight bag, all your medications and something to read.

What not to bring with you: Do not bring valuables, jewellery or large sums of money with you. If this unavoidable, please ask a relative or friend to take them home for you. The hospital cannot accept liability for the loss of items that are not handed in for safekeeping.

What happens on the day of the procedure?

Eating and drinking: Have a light breakfast at about 5am but do not eat anything after this time. You can drink clear fluids up to **two hours** before your procedure.

Medications: Keep taking your regular medications, except for any blood-thinning ones. Remember to take your blood pressure medication on the morning of the procedure (if applicable). If your blood pressure is too high on the day of the RIG, you might need to have the procedure on another day.

What happens before my procedure?

One of the ward nurses will ask you to change into a gown. They will put a small, thin tube called a cannula into a vein in your arm so we can give you fluids and medication.

They will also insert a thin tube called a nasogastric tube through your nose and into your stomach. This tube will stay in your stomach while you are having your procedure and will be taken out at the end. It is used to inflate your stomach with air so it is easier to see inside you with the x-ray images before the RIG is placed.

The ward staff will ensure that you are ready and will escort you to Interventional Radiology where you will have the procedure.

What happens during the procedure?

An Interventional Radiologist – a specialist doctor trained in image-guided procedures – will carry out your procedure. They will explain what is going to happen and ask for your consent.

They will ask you to lie flat on your back on an x-ray table and ensure you are in a comfortable position before they start. A nurse will attach you to a monitor to check your heart rate, breathing, blood oxygen level and blood pressure during the procedure.

Before they start the procedure, you may be given a sedative and some painkillers, if required, so you will be awake but very relaxed. The skin below your ribs will be cleaned with antiseptic and sterile covers will be draped over the rest of your body .

Using the nasogastric tube, the doctor will inflate your stomach with air and then use x-ray images to choose the most suitable place to insert the RIG. They will inject a local anaesthetic to numb the area where they are going to put in the tube.

They will attach two small buttons with stitches to keep your stomach in position. These sit on the surface of your abdomen and will fall off after about four weeks.

The doctor will then make a small cut in your skin and make a pathway for the RIG to be placed into your stomach. The balloon at the end of your RIG will be inflated with sterile water to hold it in place in your stomach. A dressing will then be put on the tube site.

Will the procedure hurt?

You will feel a brief sting when you have the local anaesthetic injection. You may be given sedation to make you comfortable, as long as you pass the sedation assessment.

How long does the procedure take?

It usually takes between 30 and 60 minutes but it can sometimes take longer.

What happens after the procedure?

You will be taken to the recovery room. You will be monitored to check you are ok and then taken back to your ward.

You must not eat or drink anything for **four hours** after the procedure and nothing should be put through the RIG. Once the ward nurse has ensured you are ok, they will check that your RIG tube is clear and start to use it to give you liquid food and drink. You may also be given fluids through the cannula to prevent you from getting dehydrated.

The ward nurses will regularly monitor your blood pressure and heart rate and ask if you have any pain. The RIG can feel uncomfortable when it is first put in so you may need regular pain relief.

Important: If you feel any resistance or pain when feeding using the RIG:

- do not force water down the tube
- stop feeding
- tell the gastroenterologist, nutrition nurse specialist or interventional radiologist.

One of dietitians will come to see you on the ward to discuss your feeding plan with you. They will also give you information about how to look after your RIG at home.

The day after, if you are able, you will be encouraged to practise using your tube and you and or your family will receive training on how to use and care for your feeding tube.

How do I care for the cut?

You will have a small dressing over the puncture site which you can change if necessary. If the dressing is heavily soiled, you can use a plaster to cover the cut instead. Keep the site dry for at least 48 hours, then remove the dressing and wash the area with soap and water. Avoid using lotion or powder. Make sure the cut has healed before bathing or soaking it in water.

When can I exercise and go back to work?

For the next one to two weeks, avoid heavy lifting, contact sports and strenuous exercise. When you can go back to work depends on the type of job you do. We usually suggest you take a week off.

What should I look out for after the procedure?

- Fluid leaking around the RIG tube.
- Pain when you feed or flush the tube with water. If this happens, stop the feed/flushing.
- Prolonged or severe pain with possible tummy bloating.
- New bleeding from the RIG site.

What should I do if the RIG falls out?

The community dietitian will ensure you have a spare RIG tube to keep at home in case your tube falls out or needs changing. If it falls out, you must contact your nutrition nurse or go straight to the Accident and Emergency department. E.g. go to your nearest Emergency Department (ED/A&E) with the spare RIG. If you delay going, the channel between your stomach and the abdominal wall may close.

What should I do if I cannot come for my procedure?

Please let us know as soon as possible by contacting the Interventional Radiology Department at the relevant location, so we can arrange another date and time. This also enables us to offer your appointment time to someone else.

- King's College Hospital, Denmark Hill, tel: **020 3299 3490**, **020 3299 6730** or **020 3299 3280**
- Princess Royal University Hospital, tel: **01689 863671**

Who can I contact with queries and concerns?

If you have any questions about your procedure, please contact the Interventional Radiology Nurses, 9am – 5pm, Monday to Friday.

- King's College Hospital, Denmark Hill, tel: **020 3299 3490 or 020 3299 2060**; or
- Princess Royal University Hospital, Orpington, tel **01689 863671**

More information and support

- King's College Hospital: www.kch.nhs.uk
- NHS: www.nhs.uk, tel: 111
- British Society of Interventional Radiology: www.bsir.org (click on Patients, click on patient information leaflets, select leaflet)

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

MyChart

Our MyChart app and website lets you securely access parts of your health record with us, giving you more control over your care. Visit **www.kch.nhs.uk/mychart**to find out more.

Sharing your information

King's College Hospital NHS Foundation Trust has partnered with Guy's and St Thomas' NHS Foundation Trust through the King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'

hospitals. King's College Hospital and Guy's and St Thomas' NHS Foundation Trusts share an electronic patient record system, which means information about your health record can be accessed safely and securely by health and care staff at both Trusts. For more information, visit **www.kch.nhs.uk**

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

Tel: **020 3299 4618**
Email: **kings.pals@nhs.net**

If you would like the information in this leaflet in a different language or format, please contact our Interpreting and Accessible Communication Support on 020 3299 4618 or email kings.access@nhs.net

www.kch.nhs.uk

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