

The ROYAL MARSDEN

NHS Foundation Trust

Having a glomerular filtration rate (GFR) test

Nuclear Medicine

Patient Information



NHS

Introduction

Your doctor has recommended that you have a GFR test. This is a nuclear medicine test to check how well your kidneys are working.

What is nuclear medicine?

Nuclear medicine helps doctors to check how well different parts of your body are working. A small amount of a radioactive substance (tracer) is given, usually by injection into a vein. The tracer gives off gamma rays, so we can measure the distribution of that tracer in your body. This measurement is usually done using a gamma camera, although occasionally blood samples may be needed.

Is there any risk from the radiation?

We will expose you to ionising radiation when we carry out this examination. We are all exposed to ionising radiation from naturally occurring sources such as cosmic rays, certain types of soil and rocks and even food we eat. Ionising radiation can cause cell damage that in turn, after many years, may turn cancerous. The radiation associated with your exam will therefore carry an extremely small risk which is less than 0.001%. This risk will be far outweighed by the benefits of having this exposure. We will also tailor the amount of radiation we use to you.

Please read the *Important points* section below. If you have any concerns, please contact us.

What is a GFR test?

A GFR test is also sometimes called a DTPA test. Diethylenetriamine pentaacetate (DTPA) is the chemical used to carry the radioactive tracer to your kidneys. By measuring the amount of radioactive tracer in a series of blood samples, we can measure how well your kidneys are filtering your blood.

What preparation do I need for my GFR test?

There is no special preparation for this test. You can eat and drink as normal.

You can continue to take any medication that has been prescribed for you by your doctor. It is also safe for you to take 'over the counter' medicines.

How is my GFR test carried out?

When you arrive at the department, we will inject a small amount of radioactive tracer into your blood stream. After this, you can leave the department and eat and drink as you wish. We will ask you to return to the department at specific times throughout the day, so that a small blood sample can be taken from you each time. Up to three blood samples may be needed and we will tell you the exact number and the time they are needed, once you have had your injection. In total your GFR test will take 3.5 to 4.5 hours to complete. You do not need to stay in the Nuclear Medicine Department for all this time.

Are there any side effects?

The tracer that we inject will not produce any side effects. You can continue with your usual daily activities. In particular, it will not make you drowsy and so will not prevent you from driving a car.

What happens after my GFR test?

Once your GFR test is completed, you may leave the department immediately. You can eat and drink as normal.

How will I get the result of my GFR test?

The result of your GFR test will be calculated within 24 hours after having your test. The results of your test will then be made available to the doctor who referred you.

Important points

- Due to the nature of these investigations, we advise that **you should not be accompanied by anyone who is pregnant and should not bring young children to the department.**
- If you are afraid of needles, you can ask for a spray to numb the area, before your injection.
- We are committed to ensuring patients are free from discrimination regardless of their gender or sexual orientation. If your gender was female at birth and you are transgender or non-binary, please inform a member of staff as we legally need to rule out the possibility of pregnancy before we can go ahead with some of our examinations. This information will not be recorded or shared without your consent.
- If you are **pregnant or breastfeeding**, please contact the department as soon as possible to find out if you can have this test. Generally, nuclear medicine tests are not carried out on pregnant individuals unless absolutely necessary and then the dose of radioactivity will probably be reduced.

Contact us

If you have any questions, please contact us:

The Royal Marsden, Sutton

Tel: 020 8661 3762 / 3286

The Royal Marsden, Chelsea

Tel: 020 7811 8541

Email: rmh-tr.rmuclearmedicine@nhs.net

Alternatively, please call:

The Royal Marsden Macmillan Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: patientcentre@rmh.nhs.uk

No conflicts of interest were declared in the production of this booklet.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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