The ROYAL MARSDEN
NHS Foundation Trust

Having an mIBG scan

Nuclear Medicine

Patient Information

NHS

Introduction

Your doctor has recommended that you have an mIBG scan. This is a nuclear medicine test. Scans of your body are taken to help your doctor investigate your symptoms.

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 measurement of 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 from your exam will carry a small risk, but this 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 preparation do I need for my mIBG scan?

Some medications may interfere with this scan. If you are taking any medication, you must contact the Nuclear Medicine Department before you attend your appointment (contact details on page 4).

How is my mIBG scan carried out?

On arrival at the department you will be given some medication called potassium iodate. This medication is used to protect your thyroid gland. An hour later, a small injection of the mIBG radioactive tracer will be given.

It takes about 24 hours for the tracer to be fully distributed throughout your body. Once you have had your radioactive tracer you are free to leave the department. We then ask you to return to the Nuclear Medicine Department the next day (about 24 hours after your injection) so that we can take a further scan of the distribution of the mIBG tracer, in your body. For the scan, we will ask you to lie on your back on our scanning couch while the gamma camera records information from different parts of your body. We will ask you to take off your shoes and remove jewellery and metal items from your pockets. There is no need to take off your clothes for the scan but if any of your clothing has metal studs or buttons, you may be asked to remove these. The scan will take between 30 and 90 minutes depending on which areas need to be scanned. On rare occasions, it may be necessary to ask you to return for another scan the following day (about 48 hours after your injection). We will be able to make this decision once we have seen your 24 hour scan.

Are there any side effects?

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

What happens after my mIBG scan?

Once the scan is completed you may leave the department immediately. You will be able to eat and drink as usual. You may go anywhere you wish but you should avoid prolonged close contact with children for 48 hours. This is to avoid exposing children to unnecessary radiation.

How will I get the results of my mIBG scan?

Your mIBG scan will be reported on by the nuclear medicine consultant within 48 hours of completion. The results of your mIBG scan will be available the following day to the doctor who referred you to us.

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.
- 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 afraid of needles you can ask for a spray to numb the area, before your injection. Please call the Nuclear Medicine Department if you would like to request this.
- 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 queries, please contact us on:

Sutton	020 8661 3286 / 3287
Chelsea	020 7811 8541
Email	rmh-tr.rmnuclearmedicine@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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