Guy's and St Thomas' NHS Foundation Trust

Nuclear medicine department
Royal Brompton Hospital

I-123 MIBG cardiac scan

This leaflet explains what will happen at your I 123 MIBG cardiac scan and how to prepare for it. It does not replace the need for personal advice from a healthcare professional. Please ask us if you have any questions.

What is a nuclear medicine scan?

A nuclear medicine scan is a way of taking images of the body. You are injected with a tracer, which is a substance with a small amount of radioactivity. The tracer highlights the part of the body we need to see in more detail.

About your I-123 MIBG cardiac scan

An I-123 MIBG cardiac scan is a type of nuclear medicine scan. It shows how the nerves in your heart are working. These nerves help control your heart's rhythm and function. The scan helps your specialist understand if changes in these nerves may be contributing to your symptoms. We carry out this scan using a gamma camera.

What the scan involves

The appointment can take up to 6 hours. Most of this time is waiting for the tracer to travel through your body. The tracer collects in certain nerve endings in the heart. It gives off tiny amounts of gamma radiation, which the gamma camera detects to create detailed images.

How to prepare

A member of staff will call you before your appointment to check your medicines and any allergies.

Medicines

Some medicines can interfere with the scan results. These may include:

- blood pressure medicines
- antidepressants
- antipsychotics
- diet pills
- most over-the-counter nasal sprays

We will tell you which medicines you need to stop and when to stop them. Do not stop any medicines unless we advise you to.

Allergies

If you are allergic to iodine, please tell us as soon as possible after you receive your appointment letter. See 'Contact us' on page 4.

Lying still

You will need to lie still for up to 1 hour during the scan. Please tell us as soon as possible if this may be difficult for you. See 'Contact us' on page 4.

Risks of radiation during an I-123 MIBG cardiac scan

The amount of radiation used during an I-123 MIBG cardiac scan is small and kept to a minimum. We believe that the benefits of having the scan far outweigh any risks.

The risk of a person getting cancer because of this radiation is low, 1 in 10,000 to 1 in 1,000 people. This level of risk is very small compared with the overall lifetime chance of getting cancer. The overall lifetime chance of getting cancer is around 1 in 2 people.

Information for pregnant or breastfeeding patients

Please contact us as soon as possible before your appointment if you are pregnant, might be pregnant, or are breastfeeding.

On the day of the scan

Before you arrive

- Avoid caffeine (tea, coffee, chocolate, cola and energy drinks) for 12 hours before your appointment.
- Do not eat until the scan is finished.
- You may drink water.

When you arrive

- A technologist will explain the procedure and answer any questions.
- You will be given 4 tablets to protect your thyroid. These tablets need 1 hour to start working. We will insert a small plastic tube called a cannula into a vein in your hand or arm.

- 1 hour after taking the tablets, we will inject a small amount of the radioactive tracer into the cannula.

First scan

- You will stay in the department for 30 minutes after the injection.
- We will monitor you during this time.
- We will then take the first set of images of your heart.

Waiting period

- After the first scan, there is a 3-hour break.
- You may leave the department during this time.
- Do not do any strenuous activity or exercise.

Second scan

- You will lie on the scanning couch.
- The technologist will help you get comfortable.
- We will take another set of images of your heart.
- You will need to lie still.

After the scan

- A doctor will check the images while you wait.
- Once the images are confirmed, you can go home.
- The radiation dose from this scan is very small.
- You do not need to change your routine, apart from keeping at least 2 metres away from children under 11 years of age for 24 hours.
- The tracer will not make you sleepy.
- You can drive and return to normal activities.
- You may restart any medicines you stopped.

Your results

A nuclear medicine consultant will review your scan and send the report to your referring specialist.-Your specialist doctor will discuss the results with you and explain any next steps.

Contact us

If you have any questions about your appointment, procedure or treatment, please call us between 9am and 5pm. We will answer any messages left on our answerphone within 24 hours.

Phone 020 7351 8666 or 020 7351 8669

Address Nuclear medicine department, Level 3, Chelsea Wing, Sydney Street, Royal Brompton Hospital, SW3 6NP

Was this leaflet useful?
If you have any comments about this information, we'd be happy to hear from you. **email** gstt.healthcontent@nhs.net

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please contact the department your appointment is with.

Your comments and concerns
For advice, support or to raise a concern about any service or department at Royal Brompton and Harefield hospitals. Contact our Patient Advice and Liaison Service (PALS):
• Royal Brompton Hospital **phone** 020 7349 7715
• Harefield Hospital **phone** 01895 826 572
Or **email** gstt.rbhh-pals@nhs.net

NHS 111
This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day, **phone** 111 **web** www.111.nhs.uk

Become a member of the Trust
Members contribute to Guy's and St Thomas' NHS Foundation Trust on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it's up to you how you get involved. To find out more, **phone** 0800 731 0319 **email** gstt.members@nhs.net or **web** www.guysandstthomas.nhs.uk/membership

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A list of sources is available on request

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