Nuclear medicine department

Information about your mIBG scan

What is an mIBG scan?
This scan is used to detect certain types of tumours called neuro-endocrine tumours. This examination is performed over two days.

On the first day we will give you an injection of a tracer called mIBG which contains a small amount of a radioactive substance. Four hours after this we will take the first set of pictures. You will then need to return on the second day and we will take further more detailed pictures.

Is there any preparation for my mIBG scan?

- Because some of the tracer can be absorbed by your thyroid gland, and we do not want this to happen, you will need to take some potassium iodide capsules. You will need to take these on the day before the injection, then on the day, and then finally on the day following the injection. The doctor who has referred you for the scan should have given you a prescription for the potassium iodine capsules and instructions on how to take them. If they have not, then please get in touch with them.

- Some types of medication interfere with the scan. Please contact the nuclear medicine department as soon as you get your scan appointment letter to tell us which medications you are currently taking, including over-the-counter medicines. It may be necessary for you to stop taking some of them before the scan, and we will need to discuss this with the doctor looking after you.

- Please continue to eat and drink normally.

- Please try to leave all jewellery at home, as you will need to remove all metal for the scan. We suggest you wear loose-fitting, comfortable clothes. You will not usually need to change into a hospital gown.

- Please allow plenty of time to get to your appointment, as the tracer is individually ordered for you and scans cannot normally be delayed.

- Please do not bring anyone with you who is pregnant or under 18 years of age.

- You must tell us in advance if you know you are (or think that you may be) pregnant, or are breast feeding.

What happens during my mIBG scan?
Our staff will explain the procedure to you fully when you arrive for your appointment.
Day 1
• A cannula (small tube) will be inserted into a vein in either your hand or arm, and then the radioactive tracer will be given slowly through it.

• Because, in some cases, the injection can have an affect on your blood pressure it is necessary for us to monitor it before, during and for 15 minutes after the injection. After 15 minutes we will remove the cannula.

• It takes a few hours for the tracer to concentrate in the body, so you may leave the hospital.

• You must attend for the scan later in the day at the time given to you by the technologist.

• In the time between the injection and the scan we advise you to drink plenty of fluid and empty your bladder regularly, as this helps wash out the excess tracer from your body and also makes the images clearer. You may eat as normal during this time.

• Just before the scan begins you will be asked to empty your bladder.

• We will then ask you to lie on the scan bed. We will make sure you are as comfortable as possible for the scan, as it is extremely important that you remain as still as you can.

• The scan on day 1 lasts about 30 minutes. After this you will be able to leave the hospital.

Day 2
Please attend promptly on day 2 at the time given to you by the technologist.

• We only take pictures. There are no further injections.

• Just before the scan you will be asked to empty your bladder.

• We will again ask you to lie on the scan bed. This time the scan will last up to three hours. There will be an opportunity for you to move around a little between pictures and to empty your bladder if necessary.

Will I feel anything during my scan?
The injection feels similar to having blood taken. Having the pictures taken will not hurt, but if you are in a lot of pain or find it difficult to keep still, please tell us.

What happens after my mIBG scan?
When we have checked the technical quality of your scan and are happy we have all the information we need, you will be able to leave the department.

Continue to drink plenty of fluid for the rest of the day and empty your bladder regularly. This helps wash out the tracer from your body more quickly. You may eat as normal.

A radiologist will report the scan, usually within a week and then the results will be sent to the consultant who referred you. We will not be able to give you any results on the day.

How safe is the examination?
There are small risks associated with the radioactive tracer that you have been given. However, the images give the doctors important information about your condition that helps in your treatment. The benefits of the information from the scan outweigh the small risks of exposure to radiation.
As is possible with all medication, a small number of people may be allergic to the injection, although this is rare, and usually mild. Please tell the staff attending to you if you have any allergies, or if you have any reaction to the tracer.

Following your injection, and for the rest of the day following your scan, you should try to avoid long periods of close contact with other people. This is to minimise their exposure to a small dose of radiation.

**What are the benefits of my mIBG scan?**
An mIBG scan allows us to perform two types of scan at the same time, without movement, giving us a more complete picture of your body. It allows us to look at both the structure (what they look like) and function (how they work) of the organs and tissues. It is very detailed and sensitive, so will help the doctors looking after you to monitor your treatment. It also gives them different information from that of a CT or MRI scan.

**What happens if I decide not to have the mIBG scan?**
If you decide not to have the mIBG scan, then please discuss this with the doctor looking after you.

**What happens if I cannot keep my appointment?**
If you cannot keep your appointment contact the nuclear medicine department as soon as possible so that we can offer the appointment to someone else and make you a new appointment.

Please attend promptly at the time shown on the attached appointment letter.

If you have any questions about this appointment, or any queries about the examination, please telephone the number below:

Tel: 0161 446 3942/6
If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact patient.information@christie.nhs.uk

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for urgent support and specialist advice

**The Christie Hotline: 0161 446 3658**
Open 24 hours a day, 7 days a week