
Having a sentinel node localisation

Nuclear Medicine

Patient Information



Introduction

Your doctor has recommended that you have a sentinel node localisation. This is a nuclear medicine test to look at the position of the lymph glands (nodes) which drain the area that the doctor is interested in. The procedure is carried out on the day before or the day of your operation.

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?

The amount of radiation involved is small, and is similar to the amount used in some x-ray procedures. The benefits of the scan far outweigh any potential 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 a small risk which is less than 0.1%. 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.

Your referring doctor will have considered the risks and benefits carefully before asking us to carry out this examination.

However, it is important that you read the *Important points* section below. If you have any concerns, please contact us.

What preparation do I need for my sentinel node localisation?

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 sentinel node localisation carried out?

On arrival, we will ask you to take off your shoes and remove jewellery and metal items from your pockets. We will also ask you to remove your top clothing and wear a hospital gown. The procedure involves between 1 to 8 injections of a small amount of radioactive substance (tracer). These injections will be given under the skin close to the area of interest or along the sides of the scar tissue if the lesion has already been removed. Depending on the area of interest, we may then take a series of scans to see when and where the tracer has spread to the node/s; this is done to help the surgeon find these nodes during your surgery. This may take up to three hours depending on how long it takes for the tracer to reach the node.

If we do not take scans, the tracer will be detected in the operating theatre using a gamma probe helping to locate the sentinel lymph node.

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 sentinel node localisation?

The amount of tracer injected is very small. There are no precautions that you need to take once the test has been completed. You will be given separate instructions depending on when your surgery has been scheduled.

How will I get the result of my test?

The results of your test will be made available to the doctor who referred you and to the surgeon who will be performing your operation.

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 **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:

The Royal Marsden, Sutton

Tel: 020 8661 3286 / 3287

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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