

The ROYAL MARSDEN

NHS Foundation Trust

Having a sentinel node biopsy

Breast Unit

Patient Information



NHS

What is a sentinel node?

The sentinel node (or gland) is the first lymph node in your axilla (armpit) which drains fluid from the breast. It is the first area which breast cancer may spread to. Some people have one sentinel node whilst others have more. Rarely are more than four nodes identified as being sentinel nodes.

What is a sentinel node biopsy?

This is an operation carried out under general anaesthetic, to remove the sentinel lymph node.

Why do I need a sentinel node biopsy?

The procedure helps us to find out whether or not the cancer has spread to the lymph nodes in your axilla (armpit). This information will help you and your doctors to decide what further cancer treatment may be needed. Your surgeon will have discussed with you any possible alternatives to this procedure.

Finding the sentinel node

The sentinel lymph node is marked using radioactive fluid with or without a blue dye. This gives us more than a 98% (98 in 100) chance of finding the sentinel node during the operation.

Before your operation – we will ask you to go to the nuclear medicine department and a small amount of radioactive fluid will be injected into your breast. The injection may sting a little. This radioactive fluid will travel to the sentinel node. The sentinel node will trap the radioactivity allowing the surgeon to detect them when operating.

For most people, this alone will enable the surgeon to locate the node or nodes. Very occasionally the radioactive fluid does not highlight a node and in this case, your surgeon may use some blue dye during the operation. The dye is visible straight away and may work where the radioactive fluid has not.

Occasionally it is not possible to find the sentinel node - this happens in about 2% (2 in 100) of cases. In this case the surgeon will remove a sample of nodes from the area in order to confidently plan your future treatment. This may mean more nodes are removed, but this is rarely more than 10.

Examining the node while you are asleep - the sentinel node is checked for cancer while you are still asleep. This is done using a technique called OSNA (one-step nucleic acid amplification).

The majority of patients will not have cancer in their sentinel lymph node but if cancer is found then extra lymph nodes will be removed. This is called axillary lymph node dissection or axillary clearance.

The possibility of this will have been discussed with you before your operation.

In some cases, it is not advisable to use the OSNA process as other information may be lost. You should know whether your nodes are going to be examined whilst you are under anaesthetic before the operation. If you are unsure please check with your breast care nurse.

Will a drain be left after the operation?

A drain is not usually needed after a sentinel node biopsy. If an axillary clearance is required you may have a drain inserted in the armpit to help drain away excess fluid. The drain will be removed after a few days, in the outpatient department or ward. You can go home with the drain in.

Are there any possible risks or side effects?

From the radioactive fluid

- The radioactive tracer will not produce any side effects. In particular it will not make you drowsy.
- For this specific test there are no precautions you need to take after your injection. You should, however, inform us if you are breastfeeding or may be pregnant.

From the dye

- There is a small risk (1 in 100) that you may have an allergic reaction to the blue dye. This may cause your blood pressure to fall temporarily so you may take a little longer than expected to recover from the procedure. We will then refer you for further allergy testing.
- The blue dye may stain the skin on your breast. This can last for several months but will gradually fade.
- Your urine and stools may be blue in colour for some days.

From the surgery to your axilla

- Any type of surgery to the axilla has side effects. Side effects increase with the number of lymph glands removed, so there tends to be fewer for sentinel node biopsy than for axillary clearance.
- You may develop a wound infection, haematoma (bruising) or seroma (fluid collection).
- You may have temporary shoulder stiffness.
- You may notice nerve pain and/or altered sensation in the arm.
- Lymphoedema (permanent arm swelling) can happen after any operation in the axilla. The chance of developing lymphoedema following a sentinel node biopsy is low at about 5% (5 in 100). There

is about a 30% (30 in 100) chance of developing lymphoedema at some time in your life after an axillary clearance. We will give you a leaflet about reducing the risk of lymphoedema following armpit surgery.

How accurate is sentinel node biopsy?

There is a small chance (5-10% or 5 to 10 in 100) that the sentinel node biopsy may not be accurate. This means there might still be cancer in the lymph nodes, even though no cancer cells showed in the sentinel node. This is called a false negative biopsy. However, most surgeons believe that sentinel node biopsy has a similar accuracy to other types of cancer operations on the axilla, such as axillary clearance and axillary sampling.

Contact details

If you need further information please contact your Breast Care Nurse Specialists:

Sutton **020 8661 3027**

Chelsea **020 7808 2813**

The Breast Care Nurses can be contacted Monday to Friday, 9am - 5pm.

Alternatively, please contact:

The Royal Marsden Macmillan Hotline: 020 8915 6899

(available 24 hours a day, 7 days a week)

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

This leaflet 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 leaflet are available on request from:

The Royal Marsden Help Centre

Freephone: 0800 783 7176

Email: patientcentre@rmh.nhs.uk

No conflicts of interest were declared in the production of this leaflet

Revised February 2021. Planned review February 2024
© The Royal Marsden NHS Foundation Trust BR-0267-09



Radiotherapy and
Chemotherapy Services
F538021 & F538022

