



University Hospitals Birmingham
NHS Foundation Trust



Sentinel lymph node biopsy

Your operation explained

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Introduction

This booklet is designed to give you information about having a sentinel lymph node biopsy and the care you will receive before, during and after your operation. We hope it will answer some of the questions that you or those who care for you may have at this time. It is not meant to replace the discussion between you and your surgeon, but help you to understand more about what is discussed. This operation may be performed at the same time as a breast operation, or occasionally on its own - called a stand alone sentinel lymph node biopsy. This may be offered to you if your treatment plan involves some types of breast reconstruction operations.

What is the sentinel node?

The armpit (also called axilla) contains around 10–15 small structures called lymph nodes. These are also known as 'glands'. Their main job is to help us deal with infections, but they also become involved in the spread of some cancers and may become enlarged if this happens. The sentinel node is the first lymph node in your armpit to which breast cancer cells can spread. The information helps to determine other treatment you may need.

What are the alternatives to this operation?

The main alternative is to have the majority of the nodes removed from your armpit in an operation known as axillary clearance. Lymphoedema, pain, numbness and arm/shoulder problems can be more common with axillary node clearance. Your surgeon will advise you which procedure would be best for you. If you have any questions or concerns then please discuss them with the medical team treating you.

What happens during the procedure?

You will be sent an appointment to attend the Nuclear Medicine department at the Queen Elizabeth Hospital. Here, you will receive an isotope injection into your breast. This radioactive liquid; which travels through the breast, into the lymph nodes and allows the surgeon to identify which nodes need to be taken away and tested. This usually takes place the day before your operation.

During the operation, when you are asleep, the surgeon will inject a blue dye into your breast. The dye then travels to the sentinel node and stains it blue. The surgeon is then able to locate a blue and radioactive node which will then be surgically removed. Sometimes two or three nodes are blue or radioactive and are also removed.

Some blue dye is left in the body and this can cause discoloration of the skin – most noticeably in the face. This fades over 24 hours back to normal as the dye will be passed out in the urine. Some blue staining of the breast usually occurs but this is temporary and usually fades slowly over a few weeks or months.

Once the sentinel node has been removed, the planned breast operation is performed whilst you are still asleep. You will have been given separate information about this procedure.

Please note: the dyes are just used to locate the nodes which need examining. They do not tell us if there is cancer in the nodes. This is done by the pathologist after the operation. The results will take few weeks to come back.

What happens if we cannot find the sentinel node?

Occasionally (around 5% of cases) it is not possible to find the sentinel node. If this happens then a sample of lymph nodes – usually up to four are usually removed to ensure that the sentinel node has been removed. Your surgeon will discuss this possibility with you prior to your planned surgery.

What are the risks of this operation?

Possible risks/complications of the sentinel lymph node biopsy include:

- An allergic reaction to the blue dye. The reaction can be treated but very rarely is severe.
- Lymphoedema: a long term (chronic) condition that causes swelling of the body's tissues.
- Bleeding from the wound
- Infection – If your wound becomes inflamed, red, hot, sore or oozes, you should contact your GP or the breast care nurses for advice.
- Possible discomfort and stiffness of the armpit/shoulder – exercises will help this.
- Thrombosis: You will also be fitted with support stocking which should be worn prior to the operation and until you are fully recovered. These are to minimise the risk of deep vein thrombosis (DVT). An anticoagulation injection will be prescribed daily for you to further reduce the chances of DVT for one week.

What happens after the operation?

The tissue removed in your operation will be taken to a laboratory and examined carefully under a microscope to see if the sentinel node contains cancer cells. The results usually take a few weeks to be available and an appointment will be made for you to come back to the hospital to discuss them.

If cancer cells are found in the sentinel node it is possible that the cancer has spread to other lymph nodes in your armpit. This will mean you need a second operation to remove the rest of the lymph nodes in your axilla. In some cases radiotherapy may be given to your armpit area. If the sentinel node shows no evidence of cancer cells, this means it is highly unlikely that the remaining

armpit nodes contain cancer cells and no further treatment to the armpit is required.

False negative

In very few cases, the sentinel node may show no evidence of cancer cells but there may be cancer cells in other armpit nodes. This risk is small and your surgeon will be able to discuss this risk with you further and explain how you will be monitored after your operation to look for any recurrence.

How long will I take to recover from the operation?

You will probably be able to leave hospital the day of the operation. It is usual to have two incisions (cuts), one for the breast operation and one in the armpit for the sentinel node biopsy. Dissolvable stitches are usually used and both wounds will be covered by a waterproof dressing for one week. Bathing and showering are possible during this time. We recommend that you wear a good, well fitted bra during your recovery period. Your bra should be comfortable and supportive. You will be given some arm exercises to do and these will help your recovery.

It is helpful if you make a list of all medicines you are taking and bring it with you to all your hospital appointments. If you have any questions at all, please ask your surgeon, oncologist or breast care nurse. It may help to write down questions as you think of them so that you have them ready. It may also help to bring someone with you when you attend your outpatient appointment.

Glossary of medical terms used in this information

General Anaesthetic: Medicines that are used to send you to sleep, so you are unaware of the surgery and do not move or feel pain whilst it is carried out.

Lymph nodes: are bean shaped glands that occur throughout the body. They filter lymph or tissue fluid and are important in defence against infection.

Mammogram: An X-ray image of the breast, used to detect tumours or other abnormalities.

Radiotherapy: X-ray treatment that uses high energy rays to damage or kill cancer cells.

Lymphoedema: swelling caused by a blockage in the lymphatic system, which carries lymph around the body. This can be caused by surgery or radiotherapy and can affect the arm following breast surgery.

Local sources of further information

University Hospital Birmingham NHS Foundation Trust

The Patrick Room

Cancer Centre

Heritage Building (Queen Elizabeth Hospital)

Mindelsohn Way, Edgbaston

Birmingham B15 2TH

Telephone: **0121 371 3537**

Cancer support workers are also available for advice in the oncology departments on all sites.

Breast Care Nursing Team

Queen Elizabeth Hospital Birmingham: **0121 371 4499** or
07771 940 368

or Solihull Hospital: **0121 424 5306**

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