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INFORMATION FOR PATIENTS

Sentinel lymph node biopsy

What is a sentinel lymph node?

The sentinel lymph node is the first node (or gland) into which fluid from the breast drains and is, therefore, the first place to which breast cancer can spread.

The sentinel node is usually found in a group of nodes in the armpit.

What is a sentinel node biopsy?

A sentinel lymph node biopsy (SLNB) is a procedure in which the sentinel node is identified, removed, and examined to find out if cancer cells are present.

It is a small operation which results in less scarring, less pain and quicker recovery. Having this type of axillary surgery does not affect decisions made regarding the breast operation (lumpectomy or mastectomy).

SLNB can be unsuccessful. In less than 5% of patients (1 in 20), the sentinel lymph node cannot be identified.

If the result is positive for breast cancer then further treatment to the armpit will be discussed with you. This result will also help determine the stage of the disease and is necessary for the development of an appropriate treatment plan.

How is the sentinel node identified? We use both of the following methods to identify the node:

1. Radio isotope injection

On the morning of the operation, you will be asked to attend the main x-ray department at King's Mill Hospital. A small amount of radioactive fluid is injected into the breast near to the tumour. The fluid is slowly carried to the armpit in the lymph fluid and trapped in the node. During the operation, the surgeon will locate the node using a gamma probe, which is a special handheld device that detects radioactivity.

2. Blue dye injection

This will be injected into the breast once you have been given the anaesthetic and are asleep. The dye is quickly taken to the lymph node and stains it blue making it visible to the naked eye.

These two methods used together will guide the surgeon to find the correct lymph node(s).

Potential complications of SLNB:

- Allergic reaction to the blue dye can occur. Mild reactions happen in approximately 1.8% of patients. More severe reaction (anaphylaxis) may affect 0.2% of patients.
- Bluish discolouration of the skin may be apparent for the first 24 hours and there will be a blue/greenish discolouration of your urine for a few days.

The skin of the breast at the injection site can stay blue for 6-12 months following the procedure.

- Seroma, which is a build-up of fluid at the site of surgery. This can be drained by your breast care nurse if it becomes uncomfortable.
- Numbness of the armpit. This will usually resolve in time but for a small number of patients may not disappear completely.
- Lymphoedema. This is swelling of the tissues in the affected arm caused by disruption to the normal flow of lymphatic fluid through the affected area, which may occur as a result of the surgery. However, SLNB only removes a very small number of lymph nodes and therefore minimises this risk.

Please note:

- Patients who are known to have an allergy to blue food dye and women who are pregnant should NOT have the blue dye injection but can have the radioactive isotope injection.
- The amount of radioactive substance given is very low and would equal the amount of radiation you would normally receive from the environment in a three month period. There is no problem in returning home to your family/children and friends following the breast and axillary surgery, which will be undertaken as a day case procedure,

If you have any questions or concerns please contact your breast care nurse who can arrange for you to have further discussions with the consultant breast surgeon if necessary.

Further sources of information

NHS Choices: www.nhs.uk/conditions
Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns, or complaints, and will ensure a prompt and efficient service.

King's Mill Hospital: 01623 672222 Newark Hospital: 01636 685692

Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet, please email sfh-tr.patientinformation@nhs.net or telephone 01623 622515, extension 6927.

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