

## Breast Screening Unit

### Your guide to Sentinel Lymph Node Surgery

#### Introduction

Breast cancer can spread along fine lymph channels to the lymph nodes (glands) in the armpit. This means that during breast cancer surgery the Surgeon also needs to remove some glands from the armpit. These glands can be analysed under a microscope to find out if the cancer has started to shed cells to the nodes. This information can then help you and your Doctors decide on what further treatment you may require to treat your breast cancer.

#### What is Sentinel Lymph Node (SLN) Biopsy?

The sentinel node (the chief node) is the first lymph node to which breast cancer can spread. Recent studies have shown that if the sentinel node is free of cancer cells it is very unlikely there is a further cancer in the armpit glands. So following removal of the SLN, if it is cancer free, a woman would not need to undergo any further armpit surgery. In six to eight out of ten women the armpit nodes are cancer free. Those who do have cancer in the SLN will require further treatment to their armpit. This may involve further surgery or radiotherapy to the armpit.

Removal of the lymph nodes can sometimes have side effects:

- seroma - a temporary collection of fluid in the armpit,
- neuralgia - pain in the armpit region, usually temporary,
- lymphoedema - swelling of the arm, which can be temporary or permanent,
- numbness, soreness or a stiffness of the shoulder. This is usually temporary.

The side effects of armpit surgery increase with the number of nodes removed. This means that if only the SLNs are removed the risk of side effects may be reduced.

#### What is involved in SLN Biopsy (SLNB)?

- *Before surgery* a tiny amount of radioactive fluid is injected into the skin of your breast. This fluid travels to the SLN. The breast and armpit are then scanned and the position of the SLN is marked. The radioactivity used is less than that required for a mammogram.
- *During surgery*, while you are under general anaesthetic, a 5ml teaspoons worth of blue dye is injected into the breast near the nipple. The radioactive fluid and the dye are carried along the lymph vessels to the SLN.

- The Surgeon can then remove the blue and radioactive node as this is the node most likely to be the SLN. Usually 1-2 sentinel nodes are removed.
- The SLNs that have been removed will be sent to the laboratory.

### **What if we cannot find the sentinel lymph node?**

Occasionally it is not possible to find the SLN. If this happens, but only with your prior agreement, the Surgeon, during the same operation, will remove a sample of nodes from the armpit on the side to be operated on.

### **After the operation**

Along with the rest of the tissue removed the Pathologist examines the SLN under the microscope. It usually takes a couple of weeks before you will get the results. If the SLN contains cancer cells it is possible that further cancerous cells are present in the armpit. For this reason, you will either be recommended to have further armpit surgery to remove the remaining nodes or you may be offered radiotherapy to the armpit.

### **What are the disadvantages of SLNB?**

- The radioactive injection may be slightly uncomfortable. The amount of radioactive fluid is tiny and quite safe. Allergic reactions to the dye are very rare (less than 0.1%). Allergic reactions can be treated if they occur.
- The dye may discolour your tears, urine and stools for a few days. Contact lenses may also be discoloured so please remove these before surgery. The breast skin may be discoloured for a few months and very occasionally for up to a year.
- If the Pathologist finds that the SLN contains cancer you will need more treatment to the armpit. This may be another operation or possibly radiotherapy to the area.

### **What are the benefits of SLNB?**

- Less discomfort and earlier mobility in the shoulder/arm.
- Less risk of lymphoedema
- No drains.
- Shorter hospital stay and quicker overall recovery.

**If you have any further questions please do not hesitate in speaking to your Nurse Specialist on telephone:  
0191 2820207 or 2820208 weekdays 8.30am- 4.30pm. (24 hour answerphone)**

You can also email if you prefer.

Sandra Scott                    [Sandra.Scott@nuth.nhs.uk](mailto:Sandra.Scott@nuth.nhs.uk)

Kathryn Kay                    [Kathryn.Kay@nuth.nhs.uk](mailto:Kathryn.Kay@nuth.nhs.uk)

Eileen Tague                   [Eileen.Tague@nuth.nhs.uk](mailto:Eileen.Tague@nuth.nhs.uk)

Lesley Perlish                 [Lesley.Perlish@nuth.nhs.uk](mailto:Lesley.Perlish@nuth.nhs.uk)

Joanne Wilson                 [Joanne.Wilson21@nuth.nhs.uk](mailto:Joanne.Wilson21@nuth.nhs.uk)

Alison Wright                 [Alison.Wright@nuth.nhs.uk](mailto:Alison.Wright@nuth.nhs.uk)

Further information is available on the hospital website:  
[www.newcastle-hospitals.org.uk](http://www.newcastle-hospitals.org.uk)

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