Information for patients having Sentinel Lymph Node Biopsy (SLNB)
The aim of this booklet is to give you some general information about your surgery. If you have any questions or concerns after reading it please discuss them with your breast care nurse practitioner or a member of staff at the Jane Ashley Centre. Telephone numbers are given at the end of this booklet.

Authors:
Miss P.G.Roy, Consultant Oncoplastic Breast Surgeon
Gill Stoker, Breast Care Nurse Practitioner
Oxford University Hospitals NHS Trust
Oxford OX3 9DU
**Sentinel Lymph Node Biopsy (SLNB)**

**Why am I having this surgery?**

As part of your breast cancer treatment, your surgeon has advised for you to undergo an operation to take one or two of your lymph nodes. These can be used to check whether the lymph glands in your armpit are affected by breast cancer or not.

Lymph glands or ‘nodes’ are small bean-shaped organs which lie along the lymph vessels that run through the body.

This operation is important as the knowledge of whether your lymph nodes are affected by cancer or not can influence the type of cancer treatment you are recommended to have.

This biopsy involves locating the sentinel node (also known as the watch-guard node) and checking whether or not it is affected with breast cancer cells. The sentinel node is the first lymph node into which fluid from the breast drains and is therefore the first place to which breast cancer can spread.

In breast cancer, the sentinel node is most commonly found in a group of lymph nodes underneath the arm. The average number of sentinel nodes removed is two, but may be more. Compared to other methods, Sentinel Lymph Node Biopsy has the least complications after surgery. If the results of the SLNB are positive for cancer, then further treatment to the armpit would be discussed with you. If the results of the SLNB show that the cancer has not spread, no further treatment to the armpit is needed.
What are the potential complications of SLNB?

Your surgeon will explain any possible complications so that you are aware of these when asked to sign your consent form. Some possible complications are:

1. **Mild allergic reactions to the blue dye used in the test can occur in 1.8% patients.** More severe allergic reactions “anaphylaxis” are rare and can affect 2 in every 1000 patients treated (0.2%).

2. **The area of skin on the breast where the blue dye injection is given (whilst you are asleep in the operation), can stay blue for up to 12 months (rarely longer), following the biopsy.** You might also notice your skin may have a slight blue/grey tinge for the first 24 hours and there will be a greenish discolouration of your urine for a few days after your operation.

3. **Seroma:** Seroma is fluid which sometimes collects beneath the wound. It may need draining if it becomes uncomfortable. This is a simple procedure that can be done by a breast care nurse practitioner if needed.

4. **Numbness:** You may experience numbness and/or discomfort in the armpit, upper arm and shoulder area. This will usually lessen over time but may not disappear completely.

5. **Shoulder stiffness:** You will be given shoulder exercises to carry out after your surgery which can help you maintain a good range of shoulder movement. Your breast care nurse practitioner will advise you on these exercises and provide you with a booklet so you can continue them at home.

6. **Lymphoedema:** This is arm swelling which may occur in the tissue below the skin of the affected arm. It is caused by lymph fluid that cannot drain away. SLNB only removes a small number of lymph nodes and therefore minimises this risk. However, there are further precautions that you can take to prevent or lessen the likelihood of developing lymphoedema. These can be discussed with you by one of the breast care nurse practitioners.
Will I need any tests or preparation before or during surgery?

This surgery is often performed as a day case but, depending upon the type of breast surgery and other medical conditions, you may be required to stay overnight.

Before your surgery you will be asked to attend a pre-admission clinic. At this clinic you will have routine checks e.g. height, weight and blood pressure recordings and the opportunity talk with a breast care nurse practitioner about diagnosis and surgery.

On the morning of/or the day before your surgery you will be asked to attend the breast imaging department. Here you will have a radioactive substance injected in the quadrant or quarter of your breast in which cancer lies.

The lymph glands take up the radioactivity slowly. During the operation a small piece of equipment called a ‘gamma probe’ is able to detect a signal given off by this lymph node once it has taken up the radioactive substance.

We do not expect any risks or side-effects from the low-dose radioactive substance because the total amount of radiation that you receive is less than you would normally receive from the environment over three months. There is no problem, therefore, in returning back home to your family/children after having the injection (especially if it is performed the day before the actual surgery). If you have any questions or concerns about this please speak to your breast care nurse practitioner or surgeon.

This injection is not suitable for pregnant patients.
What happens during surgery?

When you have been given an anaesthetic and are asleep, a blue dye called ‘patent blue V’ is injected into your breast. The dye is quickly taken up by the lymph node and stains it blue.

During the operation a small cut is made under your armpit. By using a gamma probe and being able to see a blue node, the sentinel lymph node can usually be easily detected by the surgeon (around 90-95% of the time). When the sentinel node cannot be detected we would recommend that an axillary node sample is collected instead. This takes approximately four glands out from the area where we would usually expect the sentinel node to be.

You will be in the recovery room while you are coming round. When you are fully awake and ready to return to the ward, the nursing staff will accompany you back.
Contact information

• Breast Care Nurse Practitioners
  Oxford    01865 235 773
  Banbury   01295 224 196

• Secretaries to Consultant Breast Surgeons
  Oxford    01865 220 935
            01865 220 932

• Jane Ashley Centre
  01865 235 350
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473 or email PALSJR@ouh.nhs.uk