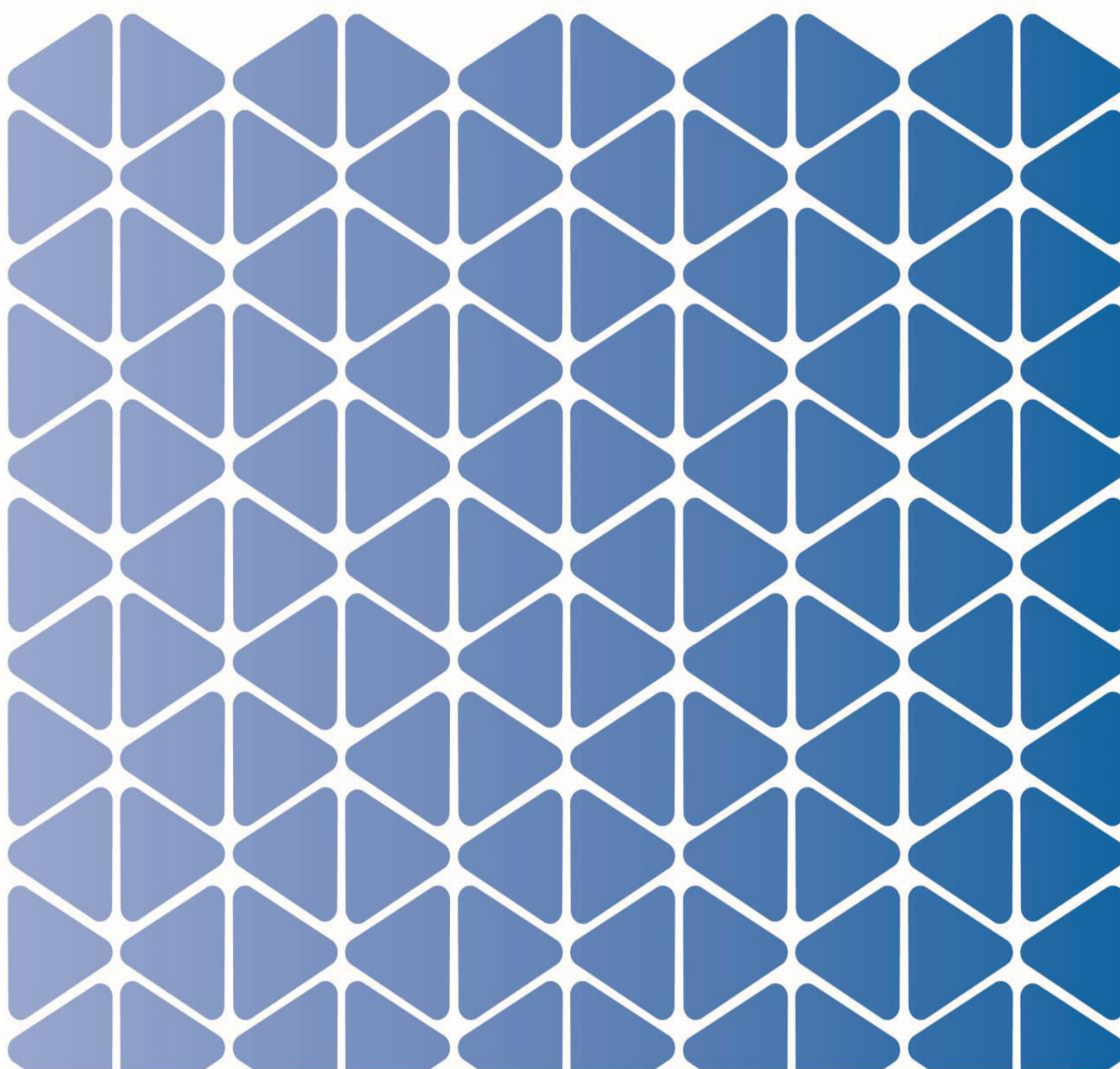


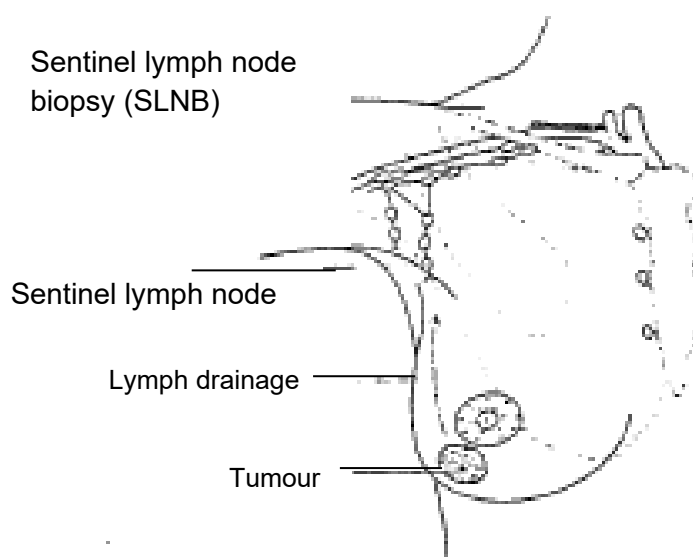
PATIENT INFORMATION**SENTINEL LYMPH NODE BIOPSY
(SLNB)**

General Surgery

Name of procedure: Sentinel Lymph Node Biopsy (SLNB)

What is Sentinel Lymph Node Biopsy (SLNB)?

Sentinel lymph node biopsy is an operation to remove the first lymph nodes under your arm that are responsible for draining the area of your breast involved by a cancer. This node is then analysed by a pathologist to determine whether there are cancer cells in it. Several large studies have shown the benefit of sentinel lymph node biopsy and it is the standard treatment for breast cancers where pre-operative ultrasound scan of the armpit/axilla raises no concerns.



What are lymph nodes?

The lymphatic system is a system of lymph vessels and lymph nodes throughout the body which play an important role in your body's mechanism of fighting infections and cancers. The lymph nodes responsible for the breast lie mainly within your armpit, but occasionally may be within your chest or neck.

Why is it so important to know whether cancer cells are present in the nodes under the arm?

The presence of cancer cells in the nodes under the arm is a strong indicator that this particular breast cancer puts you at risk of spread of disease elsewhere (metastases). Very important decisions regarding the overall treatment of your breast cancer are made, based on whether the lymph nodes contain cancer cells. This treatment may involve further surgery, radiotherapy, hormone treatment, chemotherapy, immunotherapy or a combination of these treatments.

How do you identify the sentinel lymph node?

We use a combination of up to 3 methods to identify the sentinel lymph nodes:

Isotope Injection

The day before your surgery a small amount of radioactive material is injected into your breast. This is carried out in the Nuclear Medicine Department. This radioactive material is carried into your armpit by the lymph vessels and trapped in the sentinel lymph node. Whilst you are asleep in theatre your surgeon will use a gamma probe detection device to pick up a signal from the radioactive isotope within your armpit lymph nodes. This will help your surgeon to find the correct node or nodes to remove.

Is the radioactive material harmful?

The dose of radiation you are exposed to for sentinel lymph node biopsy is very low – similar to that of having a mammogram and much less than having a CT scan.

Magnetic Tracer Injection

The magnetic tracer liquid will be injected into your breast by your breast surgeon. This can be done up to 30 days before your surgery. The liquid will flow through your lymphatic system and collect in the sentinel nodes in your armpit. Whilst you are asleep in theatre your surgeon will use a magnetic probe to identify the lymph nodes within your armpit. This will help your surgeon to find the correct node or nodes to remove.

Is the magnetic tracer liquid harmful?

The magnetic tracer liquid consists of Iron and Oxygen (Iron Oxide) and is harmless. There have not been any reported adverse effects. If you are allergic or sensitive to iron oxide or, have a cardiac pacemaker, please inform your breast surgeon. Some people may notice a discolouration of the skin at the injection site. This is a tiny amount of the tracer which has remained under the skin and should fade over time. If you are requiring breast MRI (Magnetic Resonance Imaging) monitoring or screening, future MRI of the breast could be affected by residual magnetic tracer that remains in the body after a sentinel lymph node biopsy procedure. Please discuss this with your breast surgeon.

Blue Dye Injection

This is injected once you are asleep in theatre. This dye stains the sentinel lymph node blue so that it helps your surgeon to find the correct lymph node or nodes. The blue dye may be visible around your scar following surgery – but usually fades over the following weeks or months. Some of the blue dye passes into your bloodstream and is passed out in your urine, tears or vomit.

Is the blue dye harmful?

There have been rare instances (1%) of allergy to dyes used in sentinel node biopsy. 1 in 1000 individuals might have a more significant allergic reaction which the anaesthetic team will need to address with medication whilst you are having your operation. Occasionally this may require you to be kept anaesthetised for a longer period of time.

What are the advantages of sentinel lymph node biopsy?

Sentinel lymph node biopsy is an accurate way of determining the stage of your disease. It is a significantly smaller operation than axillary node dissection – resulting usually in a smaller scar, less pain, more rapid recovery and fewer long term side effects.

What are the disadvantages of sentinel lymph node biopsy?

In less than 5% of cases sentinel lymph node biopsy does not accurately predict disease within the armpit, therefore a small number of people who have a negative node biopsy may later be found to have disease under the arm. Occasionally it is not possible to find the sentinel node. This happens in about 2% (2 in 100) of cases. In this case your breast surgeon will remove a sample of nodes from the area to confidently plan your future treatment. This may mean more nodes are removed, but this is rarely more than 10.

Serious or frequent risks

1. **Numbness or discomfort in the armpit and upper arm.** The numbness will usually lessen slowly after treatment but might not resolve completely.
2. **Shoulder stiffness and /or soreness.** An exercise sheet is included in your Information pack. Please commence these exercises 2 days after your operation to help resolve any stiffness. Occasionally extra physiotherapy is required.
3. **Lymphoedema of the arm.** This is a swelling in the tissue below the skin caused by lymph fluid that cannot drain away. It can occur when the lymph nodes are removed (by surgery) or blocked (e.g. by radiotherapy) secondary to scar tissue formation. The hand and/or arm can swell at any time after surgery to the armpit. There are certain precautions you are advised to take to help prevent lymphoedema, a leaflet on Reducing your risk of Lymphoedema is in your Information Pack.
4. **Seroma.** This is a collection of fluid under the wound that may develop post-operatively. Approximately 80% of people having an axillary lymph node clearance will develop a seroma which may need to be drained using a needle and a syringe. It is less common in Sentinel Lymph Node Biopsy surgery. If a seroma occurs it is a very simple procedure to drain it and can be done by a member of the breast team in the Outpatients Department.
5. **Haematoma.** Occasionally after an operation a haematoma (collection of blood) may develop. This may require an operation to remove it and stop any bleeding vessels.
6. **Minor skin burn.** Due to heat conduction used to stop bleeding during surgery.

- Most people will not experience any serious complications from their surgery. The risks increase for elderly people, those who are overweight and people who already have heart, lung or other medical conditions such as diabetes or kidney failure. As with all surgery, there is a 1:250,000 risk that you may die.
- You will be cared for by a skilled team of doctors, nurses and other healthcare workers who are involved in this type of surgery every day. If problems arise, we will be able to assess them and deal with them appropriately.

What will happen if my sentinel lymph node contains cancer?

We would normally recommend a second operation to remove all of the lymph nodes within the armpit (axillary lymph node dissection) or radiotherapy to the armpit.

Can sentinel node biopsy be unsuccessful?

In less than 5% (one in twenty) patients, the sentinel node cannot be identified. If this happens, we would normally recommend the treatment offered before the advent of sentinel node biopsy, which is axillary lymph node dissection (to remove all of the armpit lymph nodes) or an axillary sample (removal of a sample of armpit lymph nodes).

How long will it take to get the results from my sentinel lymph node biopsy?

When your sentinel lymph node or nodes are removed, they are analysed by a pathologist under a microscope. Usually, a result will be available within a month of your operation.

Recovery

How long it takes for you to fully recover from your surgery varies from person to person. It may take 2 – 4 weeks.

Stitches

Your wound will be closed with dissolvable stitches, surgical glue and/or steristrips (paper stitches). Please keep your wound dry for the first 48 hours.

Personal hygiene

After 48 hours you may bathe and shower as normal, but try not to soak the dressing.

Exercise

Please read the exercise sheet in your Information Folder. These exercises can be started on the second day following your operation and will help to keep your shoulders supple. Try to go for a daily walk.

Driving

You should not drive until you feel confident that you could perform an emergency stop without discomfort. It is your responsibility to check with your insurance company regarding your insurance cover after an operation. You do not need to notify the DVLA of surgical recovery unless it is likely to affect driving and persist for more than 3 months.

Work

How long you will need to be away from work varies depending on:

- how quickly you recover
- how your wounds heal
- whether you need further surgery or other treatments
- whether or not your work is physical

You can usually begin gentle work within a week or two, but you might need to wait a little longer before resuming more vigorous activity. If you need a medical sick (FIT) note for work for the first two weeks after your surgery, please ask the nurses on the ward prior to being discharged.

Contact details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

Worcestershire Breast Unit

Telephone - 01905 760261

Email - wah-tr.breastcarenursingteam@nhs.net

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.