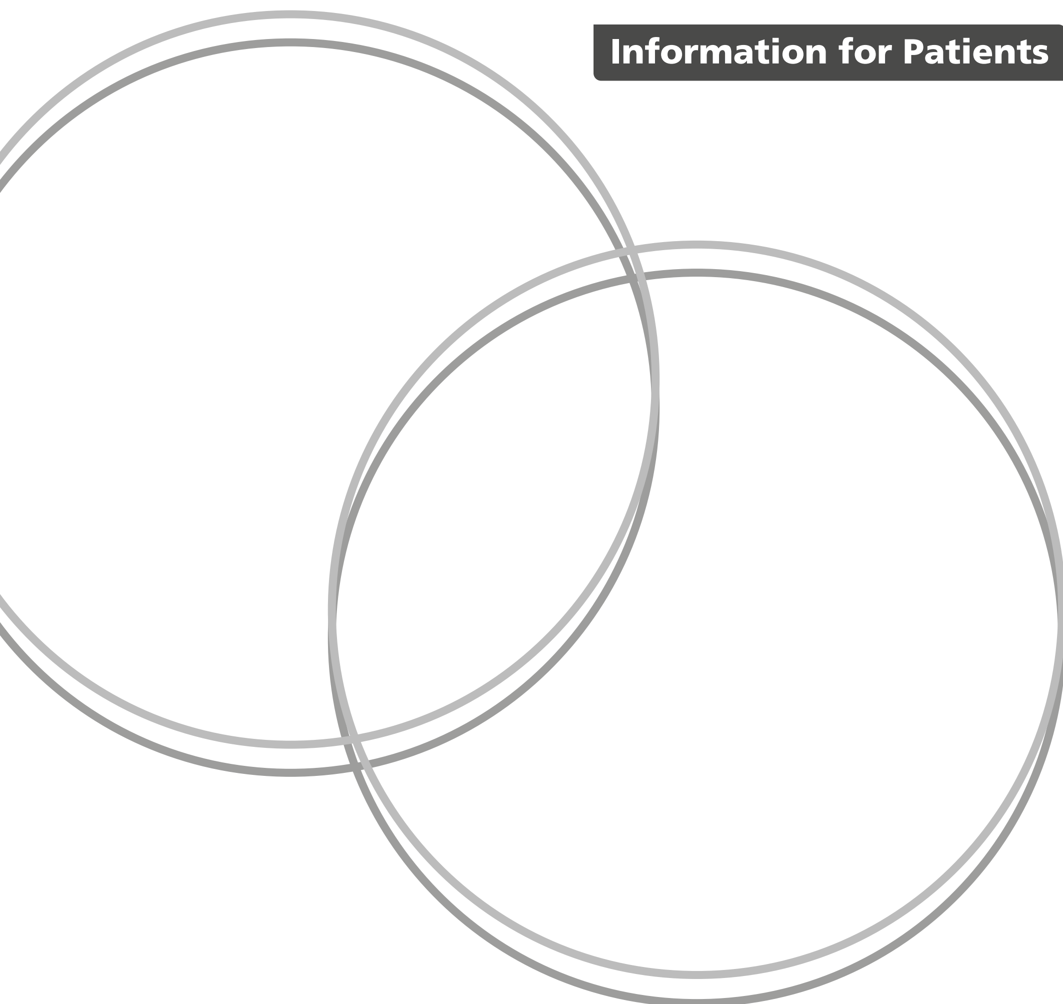
NHS
Oxford University Hospitals
NHS Foundation Trust

Sentinel lymph node biopsy and wide local excision of scar for melanoma

Information for Patients



Introduction

This booklet has been written to give you information about having a wide local excision and/or sentinel lymph node biopsy. It has been compiled by experienced staff, as well as patients, and answers the most frequently asked questions.

This information is a guide only. Your healthcare team will give you more detailed information as you need it. They are also happy to answer any questions and address any concerns you may have. We hope that you and your family will find this information both reassuring and supportive.

What is a lymph node?

A lymph node is part of the body's lymphatic system. The lymphatic system is a network of vessels that carry a clear fluid called lymph around the body. Lymph vessels lead to lymph nodes. Lymph nodes are small, round organs that trap cancer cells, bacteria, or other harmful substances that may be in the lymph. Groups of lymph nodes are found in the neck, armpits (axilla), groin (inguinal), chest and abdomen.

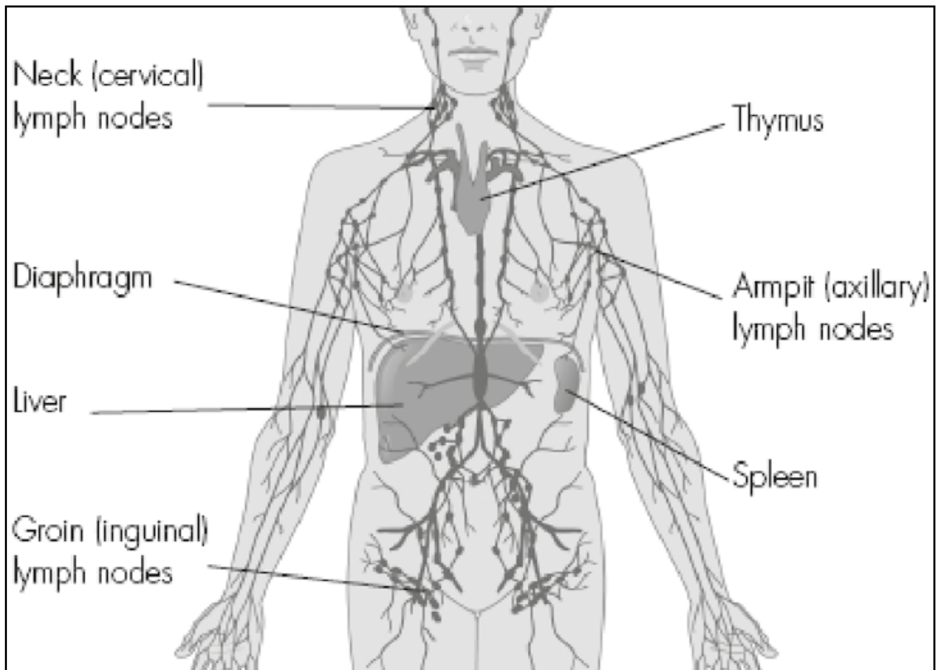
What is a sentinel lymph node?

The sentinel lymph node (SLN) is the first lymph node to which cancer is likely to spread from the primary skin cancer (melanoma). Cancer cells travel to the sentinel node before spreading to other lymph nodes. There are usually 1-2 sentinel nodes but sometimes more.

The sentinel node is usually found in the armpit (axilla), the groin (inguinal), or the neck, depending on where your melanoma was removed from. There are many lymph nodes remaining to carry on their function after the sentinel node is removed.

How do cancers spread?

Skin cancers such as melanoma and squamous cell have the ability to spread to other parts of the body; these are called metastases or ‘secondaries’. Cancers spread in different ways. The majority of skin cancers spread via the lymph system. If the cancer has been ‘caught’ by a lymph node it can grow and multiply within the node. In time it can spread to the next node down the chain and so on.



Cancers can also spread to other parts of the body in the blood stream. These can be detected by CT (Computerised Tomography) scans of your body.

What is a wide local excision?

Your melanoma has already been removed at your previous (excision biopsy) operation. The wide excision takes a 'safety margin' of skin around your scar. The size of this margin depends on the thickness (Breslow depth) of your melanoma, but is usually between 1-2cm from the edge of the excision biopsy scar. This reduces the chance of melanoma recurring in its original site. The wide excision scar is significantly longer than the original excision biopsy scar.

What is a sentinel lymph node biopsy?

SLN biopsy is a procedure in which the sentinel lymph node is removed. It is then examined in the pathology laboratory under a microscope to determine whether it contains any cancer cells. This shows whether melanoma cells have moved from the original melanoma into your lymphatic system. SLN biopsy is based on the principle that cancer cells spread (metastasise) in an orderly way, from the primary skin cancer to the sentinel lymph node(s), then on to other nearby lymph nodes

A negative SLN biopsy result suggests that the cancer has not spread to the lymph nodes or elsewhere in the body. A positive result indicates that cancer is present in the SLN and may possibly have spread elsewhere in the body. This information will help your doctor to work out the 'stage' of the cancer (extent of the disease within your body) and to develop an appropriate treatment plan.

The operation is performed under general anaesthetic, which means you will be asleep throughout. You may be able to go home on the same day or may need to stay in hospital overnight.

Advantages of sentinel node biopsy

In most patients the sentinel node biopsy is negative and this will be reassuring.

If the sentinel node is positive, the lymph node containing melanoma cells has been removed and the following options will be discussed with you:

1) You will be sent for body scans (CT & MRI),
2) These will be repeated as part of your 5 year follow up as well as skin and lymph node checks in clinic,
3) You will be referred to medical oncology doctors to discuss other treatments for melanoma,
4) The option of more surgery will be discussed.

Disadvantages of sentinel node biopsy

The main disadvantages are the possible complications of the operation as outlined in the booklet.

The chance of the sentinel node being positive varies depending on the thickness of the melanoma. For example if your melanoma is 1mm thick, the chance of a positive sentinel node is approximately 1 in 10 (10%).

Therefore it is important to consider the advantage versus the disadvantage in terms of the likelihood of the result being positive.

What if I choose not to have a sentinel biopsy?

In this case a wide excision alone will be done usually under local anaesthetic. You will be followed up in clinic with skin and lymph node examination for up to 5 years.

What will happen before the operation?

We will ask you to come to the pre-operative assessment clinic. At this appointment, the nurse will check your weight and blood pressure. We will also ask you about your medical history and any medications that you may be taking. You will have blood tests and may also have an ECG (electrocardiogram) to measure the activity of your heart as well as a chest X-ray.

On the day before or the morning of your operation you will need to have a lymphoscintogram. This is a type of scan that shows where the lymph from the patch of skin containing the melanoma would drain to. The scan does not tell us that the melanoma has spread, just the path it would take if it had spread.

What happens during the lymphoscintogram?

This scan is carried out in the nuclear medicine department at the John Radcliffe Hospital. The radiographer (specialist in X-rays and scans) will explain the process to you in greater detail.

Before the scan, we will put some anaesthetic cream around your melanoma scar and will cover it with a dressing. This will be done a short while before the scan and will numb the area around your melanoma scar.

Once the area is numb, a small amount of radioactive liquid will be injected around your melanoma scar. You will be asked to lie still for 15 minutes and then the scan will be taken. You may be asked to change position for different views of your scar. You may also be asked to return to the waiting room and walk around for up to an hour to encourage uptake of the radioactive liquid by the lymph node. Further scans will then be taken.

The position of what are called the "hot" node(s) that have taken up the most of the radioactive liquid will be marked on your skin. Please do not wash this mark off.

The day of your operation

On the day of your operation you will need to come to the ward where you will be admitted by the nurse. Please remember to follow any instructions on when to stop eating and drinking. These instructions will have been given to you at your pre-operative assessment appointment.

The anaesthetist (the specialist doctor who gives you the anaesthetic that sends you to sleep) will see you and explain the anaesthetic to you. Your surgeon will also come to see you to go over the details of the operation and the risks and benefits. Your surgeon will then ask you to sign the consent form to say that you are happy for the operation to go ahead. If you have any questions or concerns, please speak to your surgeon before signing the form.

Your surgeon will mark the side of your body where you are having the operation. If you have any questions about this, please ask your surgeon.

What does the operation involve?

When the anaesthetist has given you the anaesthetic and you are asleep, the surgeon will inject blue dye around your melanoma scar. The surgeon will then use a hand held scanner over your skin to find the sentinel lymph node (SLN) containing the radioactive liquid. When they locate this node, a cut will be made in your skin (sometimes more than one) so that the surgeon can look for the node stained with blue dye. Once they have found the SLN it is removed. It will then be sent to the pathologist (a doctor who identifies diseases by studying cells and tissue under a microscope). It takes approximately 10 - 14 days before the results are available.

The wound will be stitched, usually with dissolvable stitches, which do not need to be removed.

During the operation you will also have more skin removed from around your melanoma scar. This is called a ‘wide excision’. This significantly reduces the risk of melanoma returning in this area and removes the majority of the injected blue dye. There may be some blue stain still left behind but this will disappear over the next few months. Where possible, the wound is stitched together but if the wound is too big, a skin graft or flap may be needed.

What will happen after the operation?

You will return to the ward with a ‘drip’ in your arm. This is a small tube which gives you fluids into a vein until you can drink. You may be wearing a face mask to give you oxygen and the nurse will check your blood pressure and pulse. The nurse will also check your wound dressings and drains.

Wound

Your scars will be covered with Micropore tape and sometimes with a white absorbent dressing. Please remove the white dressing after 24 hours. The tape is water-resistant and you can shower with this still in place. Allow the area to air dry. Do not rub your wound.

Moving

We will encourage you to get out of bed as soon as you feel able to do so. This helps to minimise the risk of you developing a blood clot or deep vein thrombosis (DVT). The ward staff will be able to help you.

Urine

This may be blue/green for a few days until the dye is removed from your body.

Radioactive Liquid

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).

Follow-up Appointment

This is usually 2-3 weeks after your operation. Your wound will be checked and the pathology results will be explained.

What is the risk of complications and side effects?

Bleeding

Sometimes excessive blood can collect under the skin and form a clot called a haematoma. If there is bleeding from your wound, apply firm pressure for 15 minutes. If it does not stop please contact the ward.

Discomfort

You may experience discomfort after the surgery at the SLN site or your melanoma scar. This can be relieved with over the counter painkillers. This discomfort may last up to 2 weeks.

You may experience small stabbing or shooting pains from time to time around the wound. This can be helped by gently massaging the area. These feelings are common and will slowly settle over time. You may have a tight feeling where the sentinel node was removed. This is not uncommon but usually gets better over 6 weeks.

Fluid collection

Rarely, fluid can collect where the SLN was removed. This may need to be drained to prevent it from bursting or becoming infected. We can be do this in the outpatient clinic by removing the fluid with a needle and syringe. Usually fluid collections disappear spontaneously within 3 months.

Lymphocele

Rarely the fluid does not disperse and forms a lump (lymphocele) in the SLNB site. In this case an operation will be needed to remove it.

If the lymphocele becomes infected, an abscess forms and the fluid will need to be drained. This occurs in 1 in 100 people.

Infection

If you develop redness and tenderness around the wound, this is a sign it has become infected. This can be treated with antibiotics.

Numbness

The area around the scars may feel numb after the operation but this should wear off over time.

Lymphoedema

This is the most significant complication of SLN biopsy. Rarely, after SLN biopsy of the armpit (axilla) there can be temporary swelling (lymphoedema) of the arm or breast. This is permanent in less than 1 in every 100 people. This is due to disruption of the lymph drainage by the operation.

After SLN biopsy of the groin the lymphoedema can be permanent in 5-10 in every 100 people. This means you will need to see the lymphoedema team after your operation. They will arrange for you to have compression stockings, to prevent lymph fluid from staying in your leg.

Wound opening

Any of the above problems can cause the wound to open. If this happens the underlying problem will be treated and the wound dressed until it heals. In certain circumstances a further operation might be needed and the wound will need to be re-stitched.

Scarring

Your operation will leave a scar. This will start off feeling tight and looking red but will settle over the next 12 - 18 months. Once the wound is healed, massage the scar with simple moisturising cream, as this helps it to soften and get back normal sensation.

Cording

After the operation you may feel some temporary tightness in your arm (if you have had SLN biopsy of your armpit) or leg (if you have had SLN biopsy of your groin). This is due to scar tissue in the lymph vessels. This will settle over the first three months. You should continue to move your arm or leg as much as you are able.

Allergic reaction to blue dye

Mild allergic reaction to the blue dye used in the test can occur in 2 of every 100 patients. More severe allergic reactions – ‘anaphylaxis’ are rare and can affect 2 in every 1000 patients treated.

How will I feel at home?

Tiredness

At first you will feel rather tired, and should spend the first week or so taking it very easy. After this you will be able to slowly return to your usual activities. It is important to get moving at home from the start, but avoid strenuous activities.

Driving

You will be able to start driving once you feel up to it. For most people this will take about two weeks. Do not drive unless you are well, alert and able to carry out an emergency stop. It is advisable to check with your insurance company before you start driving.

Working

You will be able to start work again once you feel up to it. If you need a sick note, please ask your doctor while you are in hospital. If your job involves a lot of lifting or heavy work, you will need to stay off work for longer. In this case you will need to get a sick note from your GP, which states clearly what tasks you can and cannot carry out when you return to work.

Everyday activities

You will need help at home for one week with activities such as shopping, laundry, lifting children and housework.

What are my follow up arrangements?

Before you leave the ward, arrangements will be made for us to see you in the dressing clinic, usually one to two weeks after the operation. Your wounds will be checked and your dressings changed. We will give you your pathology results at this appointment.

How should I care for my wound?

Usually you will go home with Micropore tape on your wound. When you come to wash, shower only and away from the wounds. Pat the tape dry with a towel or use a hairdryer on a cool setting. If the tape you have on your wound begins to peel away, simply trim it back with scissors.

What should I look out for?

Before the operation, your surgeon will discuss with you possible complications associated with a SLN biopsy. Occasionally you may experience complications after the operation such as:

- pain that is not controlled with painkillers
- inflammation or redness of the skin on or around a wound, which may be hot to touch
- on-going oozing or bleeding from any of your wounds
- high temperature (not from a head cold or flu)
- offensive odour from wound dressings.

If you do experience any of the above side effects please contact the following numbers for advice:

SSIP Ward, West Wing, John Radcliffe Hospital
Tel: **01865 231 233**

Blenheim Ward, Churchill Hospital
Tel: **01865 223 537**

(If you experience problems getting through to the ward for advice, please contact either your GP or the Hospital Switchboard on 01865 741166 and ask to speak to the On Call Registrar for Plastic Surgery.)

Further information

If you have any questions about the information that you have read, please contact the Skin Cancer Clinical Nurse Specialist:

Tel: **01865 228 233**

Macmillan Cancer line

Provides support to people affected by cancer

Tel: **0808 808 00 00**

Website: **www.macmillan.org.uk**

Maggie's Cancer Information Centre

This Centre is based at the Churchill Hospital and provides information, guidance and support to anyone affected by cancer.

Tel: **01865 751 882**

Website: **www.maggiescentre.org.uk**

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Skin Cancer Patient Information Working Group
April 2022
Review: April 2025
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Leaflet reference number: OMI 68978