NHS
University Hospitals of Leicester
NHS Trust

Sentinel lymph node biopsy and wide local excision

Department of Dermatology

Produced: March 2023

Review: March 2026

Leaflet number:646 Version: 3

Introduction

This booklet has been written to give you information about having a sentinel lymph node biopsy and wide local excision. 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.

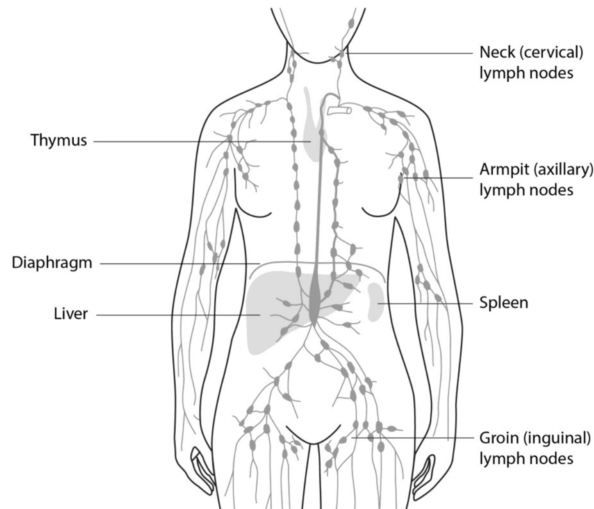
What is a sentinel lymph node?

The sentinel lymph node (SLN) is the first lymph node to which cancer is likely to spread from the primary melanoma. Cancer cells travel to the sentinel node before spreading to other lymph nodes. In some cases there may be more than one sentinel node. The sentinel node is usually found in the armpit (axilla), the groin (inguinal), or the neck, depending on where your melanoma was removed from.

How do cancers spread?

Skin cancers such as melanoma and squamous cell can 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.

Re-use of this leaflet is restricted by Creative Commons license



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 sentinel lymph node biopsy?

Sentinel lymph node (SLN) biopsy is a procedure in which the sentinel lymph node is removed. It is then examined 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.

A negative SLN biopsy result suggests that the cancer has not spread to the lymph nodes. A positive result indicates that cancer is present in the SLN and may be present in other lymph nodes in the same area (regional lymph nodes). 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 SLN biopsy 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.

What will happen before the operation?

We will ask you to come to the pre-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 sentinel node injection and scan. 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.

The Nuclear Medicine Service booklet "Having sentinel node injections and scanning before melanoma surgery" contains more information about this.

What happens during the scan?

The scan is carried out in the Nuclear Medicine Department at the Leicester Royal Infirmary. A member of staff will explain the process to you in greater detail.

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 done. 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 done.

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 node 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 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).

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 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.

Further Information

What does the operation involve? (continued)

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 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 dry on its own. 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).

What are the possible risks and complications?

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 for up to two 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 six 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 do this in the outpatient clinic by removing the fluid with a needle and syringe.

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% of people. This is because the lymph drainage has been damaged by the operation.

What are the possible risks and complications? (continued)

After SLN biopsy of the groin the lymphoedema can be permanent in 5 to10% of 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 problem will be treated and the wound dressed until it heals. In certain circumstances a further operation might be needed and the wound might 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 to18 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.

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 for one week with activities such as shopping, laundry, lifting children and housework.

Follow-up

Before you leave the ward, you will be given an appointment for the dressing clinic, usually one to two weeks after your operation. Your wounds will be checked and your dressings changed.

We will discuss the results of your biopsy with you either at this appointment or at your first out-patient clinic appointment after this.

How should I care for my wound?

Usually you will go home with tape on your wound. It is better to have a shower rather than a bath. 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?

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
- Oozing or bleeding from any of your wounds
- High temperature (not from a head cold or flu)
- Offensive smell from wound dressings

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

Monday to Friday 9am to 4pm:

Telephone: 0116 258 5328

Outside these hours, and at the weekend:

Telephone: 0116 258 5375 (Ward 9)

(If you have problems getting through to the ward for advice, please contact either your GP or the Hospital Switchboard on and ask to speak to the on call registrar for Plastic Surgery).

If you have any questions about the information, please contact:

Skin cancer nurse specialists / key workers

(Monday to Friday, 9am to 4.30pm)

Telephone: 0116 258 6170

Or use their mobile numbers to contact them:

Karen Elton: 07956 164379

Lucy England: 07956 164363

Macmillan Information and support Centre

Osborne Building

Leicester Royal Infirmary

LE1 5WW

Tel: 0116 258 6189 (Mon-Fri, 9:30am - 4:30pm, answerphone available)

Email: cancerinfo@uhl-tr.nhs.uk

Website: www.leicestershospitals.nhs.uk/cancerinfo

With thanks to Oxford University Hospital Trust for their help in producing this information.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો
ਜੇ ਤੁਸੀ ਇਹ ਜਾਣਕਾਰੀ ਕਸਿ ਹੋਰ ਭਾਸ਼ਾ ਵਚਿ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦੱਤਿ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference:

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

LEICESTER'S RESEARCH

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/patient-and-public-involvement