



**East Kent  
Hospitals University**  
NHS Foundation Trust

# Having a sentinel lymph node biopsy and wide local excision for malignant melanoma

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Information for patients from the Skin Cancer Multidisciplinary Team (MDT)

If you have recently been diagnosed with melanoma, you will most likely need further treatment called **wide local excision (WLE)**. In addition to this, you may be eligible and benefit from an additional procedure called **sentinel lymph node biopsy (SLNB)**.

This leaflet explains what each surgical procedure involves and the benefits and risks of having them. If you have any further questions or concerns after reading this leaflet, please feel free to speak to your skin cancer nurse specialist who would be happy to help.

## What is a sentinel lymph node biopsy?

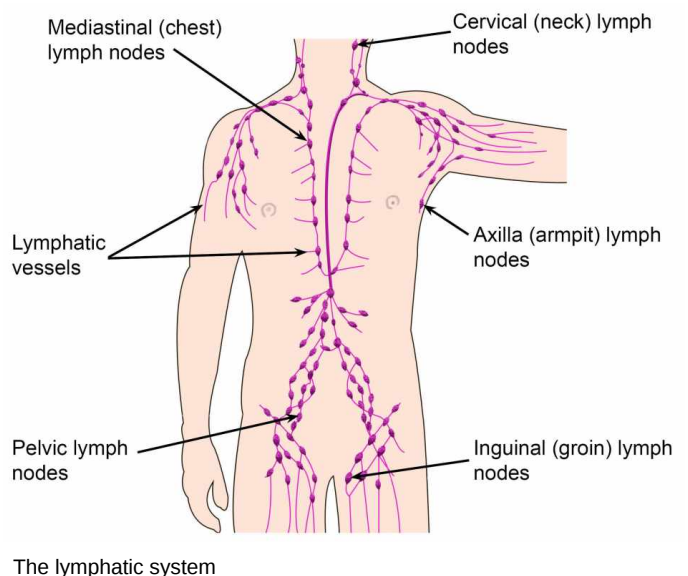
A sentinel lymph node biopsy is a surgical technique used to find out if melanoma cells have spread from the original site into your lymph glands. The cancer cells in these lymph glands can be so small that they cannot be felt or seen on a scan, so the biopsy is the most accurate way of checking for any spread of the melanoma cells.

Once removed, these glands are then examined under a microscope.

## What is the lymphatic system?

Lymph glands (or nodes) are fleshy structures that usually lie in groups in the neck, axilla (armpit), groin, abdomen, and chest. These nodes receive lymph, a clear or whitish fluid, from every part of the body through a network of fine tubes called lymph vessels. Lymph is rich in the white cells which help us fight infections.

Each area of skin will drain lymph fluid into certain nodes, usually the group of nodes which are closest. The first node the fluid drains into is called the sentinel node.



Sentinel nodes act like police officers within the lymphatic system, checking what is passing through the body. Any melanoma cell that becomes loose from the original site often travels in lymph channels and passes to the sentinel lymph node where they become trapped. As the melanoma cells grow and multiply in the lymph node, it can become larger and the node can be felt. However, in the early stages there are very few melanoma cells present in the node and they cannot be felt through the skin – hence the need to biopsy the sentinel lymph node and examine it under a microscope to see if the melanoma has spread.

### What does a sentinel lymph node biopsy involve?

The biopsy involves a surgical procedure usually under a general anaesthetic (with you asleep). It removes one or more of the nodes the lymph fluid drains into first, and which are closest to the area where the melanoma has been found. For example, if the original melanoma is on the right calf of your leg, the sentinel lymph node is likely to be in your right groin. On the other hand, if the melanoma was on your right arm, the sentinel lymph node is likely to be in your right armpit. In areas like the trunk or head and neck, there may be more than one group of lymph nodes involved.

### Who does the sentinel lymph node biopsy?

A specially trained surgeon based at either the Queen Elizabeth the Queen Mother (QEQM) Hospital in Margate or the William Harvey Hospital in Ashford will carry out your biopsy. The surgeons are part of the Skin Multidisciplinary Team (MDT).

The MDT is a team of health professionals specialising in different areas of patient care, including dermatologists, surgeons, pathologists, radiologists, a doctor specialising in cancer treatment (oncologist), and specialist nurses.

Your individual situation will be discussed by the team before your clinic appointment. All members of the team are available to talk to you about what is involved and answer any questions you may have, before you decide whether to go ahead with any treatment.

For more information, please read the Trust's **Your Multidisciplinary Cancer Team** leaflet that you were given at your hospital appointment. (/your-multidisciplinary-cancer-team)

## How long will I be in hospital?

This is a day procedure so you will be able to leave hospital after your procedures. Please allow most of the day for the procedures to be carried out.

## What are the advantages of a sentinel lymph node biopsy?

This biopsy is not a treatment but it does give more information about the stage of your disease. It provides you and your Skin Cancer Team with the most accurate information about the risks of your melanoma returning and what the future may hold for you.

## What happens before the sentinel lymph node biopsy?

- Before the date of your procedure, you will be asked to come into hospital for a **preassessment appointment**. At this appointment you will speak to a preassessment nurse who will make sure you are fit for surgery and answer any questions you may have. Please use this time to raise any concerns.
- We want to involve you in all the decisions about your care and treatment. If you decide to go ahead, you will be asked to **sign a consent form**. This confirms that you agree to have a sentinel lymph node biopsy and you understand what this involves. Please remember you can withdraw your consent for treatment at any time.
- You will be asked to come to the Nuclear Medicine Department at the KIMS Hospital in Maidstone the day before your biopsy, for a scan called **lymphoscintigraphy**. This finds the lymph node(s) which will be removed the next day by your surgeon.

You will be asked to lie down and small injections containing a substance called a tracer are injected around the original melanoma site. It is called a tracer because it is slightly radioactive and can be picked up or 'traced' using a special scanner called a gamma probe. Although the word radioactive may sound alarming, it is completely safe.

The tracer drains into your lymphatic channels and then to your lymph nodes. Whichever lymph node(s) the tracer drains into first is the sentinel lymph node(s). A type of x-ray picture is taken and the skin over the sentinel node is marked to help the surgeon find the sentinel lymph node(s) easily and make the incision (cut) in the right place when you have your biopsy.

This scan normally takes about 90 minutes, sometimes more, depending on where the melanoma is and where the lymph nodes involved are. Afterwards you can go home.

## Can I eat or drink before my biopsy?

On the day of your biopsy, please do not eat anything for six hours or drink anything for four hours before your procedure. If you have food or drink in your stomach when you have the anaesthetic, there is a higher risk of you being sick while unconscious.

## Should I take my normal medication on the day of my procedure?

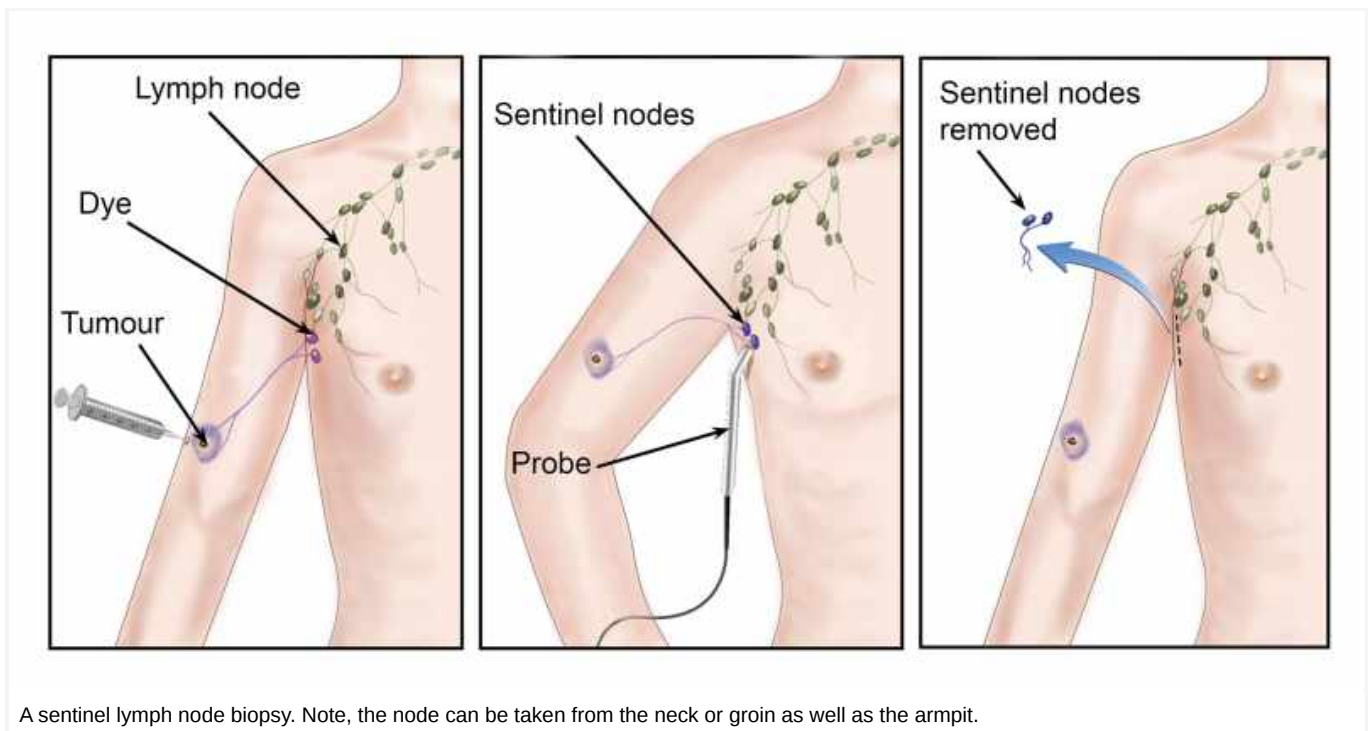
Unless told otherwise, take any regular medicine as usual on the day of your operation with only a sip of water.

## What happens during the sentinel lymph node biopsy?

The day after your scan at the KIMS Hospital, you will have your biopsy performed at either QEQM in Margate or the William Harvey Hospital in Ashford. Please refer to your appointment letter for details of where you need to report to.

The biopsy is done under general anaesthetic (you will be asleep and feel no pain). There can be risks involved with having a general anaesthetic but they are small. An anaesthetist will talk to you before your biopsy to make sure you are fit enough for a general anaesthetic. Please speak to them if you have any concerns about the anaesthetic.

Once you are unconscious, you will have another injection around the original area of the melanoma but this time with a blue dye. The blue dye travels along your lymphatic channels to the sentinel lymph node(s) - see diagram below.



Lymph nodes look like bunches of grapes. The blue dye helps the surgeon to see the sentinel lymph nodes and make sure the correct nodes are removed (cut out).

Sometimes (very rarely) we are unable to identify the sentinel lymph node during the procedure or it may not be possible to adequately analyse the node which has been removed.

Once the lymph node(s) has been removed, while you are still under a general anaesthetic, your surgeon will remove more tissue from around the area the melanoma was found. This is called a wide local excision.

## What is a wide local excision?

At this stage, the original melanoma will have been removed and there might be a small scar from your original skin biopsy.

It is important the tissue around the original area of melanoma is also removed; this is a wide local excision. Wide local excisions are important as it aims to remove any stray cancer cells which may have been left behind. This lowers the risk of a melanoma returning to that area in the future.

Your surgeon will discuss with you how much skin needs to be removed, as the recommended margin depends on the thickness of your original melanoma.

### What will the area of skin look like after my procedure?

Your surgeon will talk through how they will remove the extra tissue and how your wound will be repaired afterwards.

### Are there any risks with sentinel lymph node biopsy and wider local excision?

- **Infection:** as with all operations, there can be a risk of infection. Your surgeon will do everything they can to reduce this risk. You may notice after surgery your wound becomes red, tender, and swollen; this is not unusual and should improve. If you notice signs of infection, such as inflammation, or your wound becomes very red and hot, or you have a raised temperature, please contact your GP. You may need antibiotics to treat an infection.
- **Seroma:** sometimes a pocket of fluid will collect in the area which has been operated on; this is called a seroma. It happens because your drainage system has been interrupted. Signs of a seroma can be swelling, a feeling of fluid moving in the area, and discomfort. This usually settles down by itself after a couple of weeks. In some severe cases you may need to come back to the hospital to have the seroma drained with a needle.
- **Stiffness:** limited movement in your affected arm or leg after your procedure is common and will improve as your wound heals. Your team will tell you how and when to move your arm or leg.
- **Scars:** treatment for melanoma needs different surgical methods such as incisions (cuts) and excisions (cutting out), so it is quite common to have scarring left on your skin. Your surgeon / surgical nursing team will advise you about skin care before you go home.
- **Discomfort:** you may feel some discomfort after your procedure. This will improve as your wounds heal. Your surgeon can discuss painkillers to help with any pain.
- **Numbness or tingling around your wound:** this should return to normal as your body heals. If you become worried, please contact your Skin Cancer Team.
- **Blue / green urine:** as the radioactive tracer and dye are flushed from your body, you may notice the blue dye when you pass urine. This will last for 24 to 48 hours before returning to normal.
- **Allergy:** there is a small risk that you will have an allergic reaction to the blue dye. Your surgeon will look for signs of allergy while you are unconscious. If you do have a reaction, you will be given medication to reverse the effects of the dye and be closely monitored.
- **Lymphoedema:** rarely, the affected arm or leg can become swollen. This is called lymphoedema and is diagnosed by the Skin Cancer Team. It may be temporary or in some cases, permanent. There are lymphoedema nurse specialists who can help you manage and improve symptoms of lymphoedema. Please speak to a member of your Skin Cancer Team about a referral to the lymphoedema nurse specialist or if you have any concerns.

### What happens if I decide not to have a sentinel lymph node biopsy?

Sentinel lymph node biopsy is not a treatment for melanoma. It is done to get more information. If you would prefer not to have this done, you do not have to; this decision will not affect your treatment. You will still be offered a wide local excision. This is standard treatment for melanoma and it is likely your Skin Cancer Team will advise you to have this. You will also be offered regular follow-up appointments so you can be monitored.

### **What happens after my procedure?**

- Do not undertake strenuous activity.
- Do not operate machinery or do anything needing fine co-ordination or judgement, for example using a cooker, for at least 24 hours.
- Do not make any important decisions or sign important documents for the first 48 hours after your operation.
- You must not drive a car, or ride a motorbike or bicycle for at least 48 hours, unless advised otherwise by your doctor. You must arrange for a responsible adult to collect you from the hospital after your procedure and to take you home (in a car or taxi, not by public transport). It is not advisable or safe to travel home on your own.
- You must arrange for a responsible adult to be with you for the first 24 hours following your operation.
- You may eat as you wish, but your appetite may be poor to begin with. You must drink plenty of fluids. Do not drink alcohol or take sleeping tablets for at least 24 hours.
- Follow the advice on the leaflets that you have been given.
- Some people may feel emotional or “weepy” during the first few days; this is normal.

### **How do I look after my wound at home?**

The affected area(s) is likely to have stitches and be covered by a dressing. You will be advised how to care for your wound before leaving hospital.

### **What happens to the sentinel lymph nodes after they have been removed?**

The sentinel lymph nodes are sent to our laboratory to be examined under a microscope. The results take between 10 to 14 days and will be discussed with you during your next clinic appointment. Your specialist nurse will be happy to discuss this with you in more detail.

### **What happens if the sentinel node contains melanoma cells?**

If the sentinel lymph node(s) contain melanoma cells your doctor or cancer nurse specialist will discuss your treatment options with you at your next outpatient appointment, after your surgery. This may involve further surgery and/or a referral to oncology to discuss adjuvant (preventative) drug treatment.

Whichever treatment you have, your progress will be monitored with regular appointments with the Skin Cancer Team.

## What happens if the sentinel lymph node biopsy is negative?

If the sentinel lymph node(s) does not contain any melanoma cells, you will not need any further surgery. You will still need regular appointments so we can closely monitor you.

## Summary of advantages and disadvantages of having a sentinel lymph node biopsy

- **Possible advantages of SLNB**

- The operation helps to find out whether your cancer has spread to your lymph nodes. It is better than ultrasound scans at finding very small cancers in the lymph nodes.
- The operation can help predict what might happen in the future. For example, in people with a primary melanoma that is between 1mm and 4mm thick:
  - around one in 10 die within 10 years if the SLNB is negative
  - around three in 10 die within 10 years if the SLNB is positive.
- People who have had the operation may be able to have adjuvant (preventative) drug treatment with immunotherapy or targeted therapy. This can reduce the chances of the melanoma spreading to other areas of their body in the future.

- **Possible disadvantages of SLNB**

- The purpose of the operation is not to cure the cancer. There is no good evidence that people who have the operation live longer than people who do not have it.
- The result needs to be interpreted with caution. Of every 100 people who have a negative SLNB, around three will develop a recurrence in the same group of lymph nodes.
- The operation results in complications for between four and 10 out of every 100 people who have it.
- A general anaesthetic is needed for the operation.

If after reading this leaflet you have any further questions or concerns about this procedure, please speak to your specialist nurse at your next appointment.

**This leaflet has been produced with and for patients.**

**Please let us know:**

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

**You can let us know this by:**

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

**Any complaints, comments, concerns or compliments**, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email ([ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)).

**Patients should not bring large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

**Further patient information leaflets** are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

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