Lancashire Teaching Hospitals
NHS Foundation Trust

Information for patients and carers

Sentinel Lymph Node Biopsy for Melanoma

Excellent care with compassion

Plastic Surgery, Surgery

@LancsHospitals

Introduction

This leaflet will tell you about sentinel lymph node biopsy following a diagnosis of melanoma. It will explain why and how this procedure is done.

This leaflet is for anyone diagnosed with melanoma who is considering a sentinel lymph node biopsy procedure.

Sentinel lymph node biopsy may give useful information about the stage of melanoma in some newly diagnosed patients.

In this area, Sentinel lymph node biopsy is offered to people who have a melanoma measuring one millimetre or more in depth. The pathology results from your first biopsy show the thickness of your melanoma.

What is melanoma?

Melanoma is a type of skin cancer. If it is treated early enough it can be cured.

In some people melanoma can spread to lymph nodes or other parts of the body.

Melanoma is more difficult to treat if it spreads.

What are lymph nodes?

Lymph nodes form part of your body's immune system. They are also known as lymph glands.

They are found in your armpits, groins and neck. These sites are known as lymph node basins.

They can become enlarged when your body is fighting infection or if they are affected by cancer.

In some people melanoma cells will spread to the lymph glands closest to the melanoma.

What is the sentinel lymph node?

The first gland that the melanoma is likely to spread to is known as the sentinel lymph node.

What is the sentinel lymph node biopsy (SLNB)?

In this procedure the sentinel lymph node is identified, removed and examined.

Once removed the lymph gland is looked at under a microscope to see if it contains melanoma cells.

If the sentinel node is free from cancer the remaining lymph nodes are likely to be cancer free and there is a lower risk of it spreading anywhere else in the body.

If the sentinel node contains cancer cells there may be a higher risk that it could spread elsewhere in the future.

What are benefits of sentinel node biopsy?

The operation helps to find out whether the cancer has spread to the lymph nodes and it can help to predict what might happen in the future.

It will give more accurate information about the stage of your melanoma.

People with a negative sentinel lymph node biopsy may be reassured that the melanoma is less likely to spread.

There may be a small treatment advantage for people who have a positive sentinel node biopsy.

People with a positive sentinel node biopsy may be a candidate for more intensive follow up with scans. People with a positive sentinel node biopsy may be a candidate for melanoma preventative drug therapy.

What are the possible disadvantages of the sentinel node biopsy?

The purpose of the operation is not to cure the cancer; its value is in finding out further information about the stage of the melanoma.

Of every 100 people who have a negative sentinel lymph node biopsy, around 3 will later develop a recurrence in the same group of lymph nodes.

A general anaesthetic is needed. The operation results in complications in between 4 and 10 out of every 100 people who have it.

It may not be possible to identify the sentinel lymph node in 5 out of every 100 people in which case you will need to have the standard treatment for melanoma.

Is there an alternative to this procedure?

The alternative to sentinel node biopsy is to have the standard treatment of wider excision of the melanoma scar only and regular monitoring of your lymph glands in the outpatient clinic. In this case we will not have the extra information about the stage of the melanoma provided by sentinel node biopsy.

What happens during the sentinel lymph node biopsy procedure?

The sentinel lymph node biopsy is done at Lancashire Teaching Hospitals. It is done under a general anaesthetic.

You will usually be admitted to the hospital early on the day of the procedure, occasionally you will asked to attend the day before. When you arrive, a local anaesthetic cream (EMLA) will be applied your melanoma scar to numb the area. **Please notify the nurse in charge if the cream is not applied within half an hour of your arrival.**

You will be advised of when to stop eating and drinking before the operation.

Your surgeon will explain the procedure and ask you to sign a consent form.

The procedure is done in two parts; first the sentinel node is identified using radioactive tracer fluid and a scan, secondly dye is injected around the melanoma scar and the sentinel lymph node is removed during an operation.

Identifying the sentinel lymph node

The sentinel node is identified by using a small amount of radioactive tracer fluid which is injected around your melanoma scar. This will be done in the nuclear medicine department usually on the morning of your operation.

If you have any ethical or moral objections to receiving a human blood product, please notify your cancer team as soon as possible

because the injection contains a small amount of human albumin and there is no alternative product.

You will be awake for this part of the procedure.

A scan of your lymph glands will be taken. You will need to lie still for up to 2 hours for this process.

This part of the process is called lymphoscintigraphy or sentinel node mapping; it shows the position of the sentinel lymph node.

Occasionally more than one sentinel lymph node may be identified and these may be in different parts of the body.

If a sentinel node is identified in more than 2 lymph node basins it will not be possible to perform the sentinel lymph node biopsy operation. In this case you will need to have the standard treatment for melanoma.

After the scan you will return to the ward.

Removing the sentinel lymph node

This is done later on in the operating theatre department; you will be given a general anaesthetic and will not be awake during the operation.

The surgeon will inject a small amount of blue dye around your melanoma scar.

The dye travels along your lymph vessels to the lymph nodes within 10-30 minutes.

The surgeon identifies the position of the sentinel lymph node containing the radioactive fluid and the blue dye. This node is carefully removed and sent to the pathologist for examination.

The blue dye used during the operation may case parts of your skin to be discoloured. This is a temporary reaction and the discolouration will fade in time.

The dye can also temporarily cause the whites of your eyes to become discoloured and may temporarily affect the colour of your urine and bowel motions.

There is a small risk of allergic reaction to the blue dye and usually presents as a skin rash or itching. In very rare cases this can be severe. During the operation the surgeon will also perform the wider excision of the melanoma scar and this will be sent for examination.

Both wounds will be closed and you will be woken up at the end of the operation.

Possible complications of the procedure

Most operations are straightforward; however as with any surgical procedure there is small chance of complications. This list of complications is not intended to put you off having the operation, but you need to be aware of any potential risks or complications before you consent to having surgery.

Bleeding. There is a risk that you could experience bleeding from the site of the operation, this may result in a collection of blood beneath the stitch line and you may need another operation to remove it. Symptoms of excessive bleeding include pain and swelling around your wound.

Infection. There is a risk of wound infection, which can occur at any time following surgery. If your wound becomes infected you may need treatment with antibiotics. After a wound infection, healing may be delayed and you may need dressings for a longer period than normal.

Wound breakdown. There is a risk that your wound may break down following surgery. If this happens you will require dressings for a longer period of time than usual, or you may need further surgery.

Fluid collection at the wound site. There is a risk that lymph fluid may pool beneath your stitch line after surgery. A collection of lymph fluid can occur at any time after the operation. Your body will usually reabsorb this fluid without any need for medical attention.

Scarring. You will have a small permanent visible scar on your skin at the site of the sentinel node biopsy. Scars tend to improve over a period of 18 months following surgery. In some patients, for genetic reasons, scars can become raised, red and lumpy; unfortunately this is largely beyond surgical control. The way a scar develops depends as much on how your body heals as it does on your surgeon's skills.

Swelling of affected limb (lymphoedema). Rarely after a sentinel lymph node biopsy operation you may experience gradual swelling of the limb closest to the site of the operation. The affected area may become stiff, swollen or awkward to move. It is often treated using a combination of exercise, massage and the wearing of an elastic garment on the affected limb. Occasionally the affected limb may be permanently swollen.

After sentinel lymph node biopsy from your neck. During a sentinel node biopsy operation from your neck there is a risk that the nerve to your shoulder may be affected, in rare cases this may result in long term pain and weakness of the affected shoulder.

Anaesthetic risks and complications. You will need a general anaesthetic. Your anaesthetist will give you more information about your anaesthetic and will discuss anaesthetic risks and complications with you prior to your surgery.

Is it safe for me to have the radioactive injection?

The injection contains a small amount of radioactive tracer which emits gamma rays (these are similar to x-rays). We use the smallest dose possible to provide as much information as we can about your condition.

The radiation dose is very low and is similar to the natural background radiation we all receive from the environment over a period of 2 weeks.

The results of your scan will provide useful information about your condition and will help the team plan your treatment. So the benefits of having the scan far outweigh the tiny radiation dose you will receive.

Further information can be found at the Health Protection Agency website: http://www.hpa.org.uk/web/HPAwebfile/HPAwebC/1194947388410 X-rays – How safe are they?

What happens after the operation?

After the operation is finished and you are awake and comfortable, you will return to the ward.

You will have two or more wounds; from the sentinel node biopsy site(s) and from the wider excision site.

Occasionally a skin graft is needed to close the wider excision wound. If this happens you will have a third wound from where the skin graft was taken.

You will be asked to rest on a bed until you have recovered from the anaesthetic.

You can usually go home on the evening of the surgery; this will depend on your recovery from the operation.

People often feel light headed and sickly after a general anaesthetic. If you do go home on the same day as the operation it is advisable to rest quietly for the rest of the day following your discharge.

You will be allowed to go home when your follow up appointments have been arranged, and the nurses are happy with your wounds.

You should not drive for 24 hours after a general anaesthetic. Please arrange for someone to take you home from hospital.

What are the next steps?

Appointments for wound dressing changes will be arranged by the hospital.

Your results will be relayed to you either in a face to face appointment or via telephone. Please note the results will take at least 3 weeks to be processed therefore any appointment will be after this date. If you object to information being given via the telephone, please advise your skin cancer nurses on 01772 522062.

If the sentinel lymph node is free from cancer cells you will not need any further treatment at this time. You will have regular appointments in the outpatient clinic to monitor your skin and remaining lymph nodes.

If the sentinel node contains cancer cells your case will be discussed at the skin cancer multidisciplinary team meeting (MDT) to decide if any further treatment is required. You may need a CT scan if the sentinel node contains cancer cells.

Some patients with cancer cells in their sentinel node will be offered an appointment with the skin cancer oncology team.

Contact details

If you have any questions or concerns at any time please contact your skin cancer nurse specialist nurses on 01772 522062 or 07525387668. A voicemail service is available for non-urgent messages and the specialist nurse will aim to return your call within one working day. You can also email skincancerCNSteam@lthtr.nhs.uk

Please note that this is not an emergency service and does not operate out of office hours. You should contact your GP if you need advice on the same day.

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.patient.co.uk
www.accessable.co.uk

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

Gujarati:
આ માહિતીને સમજવામાં સહાયતા જોઇતી હોય તો કૃપા|કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

Romanian:
Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi.”

Polish:
Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji.
Informacje te można również udostępnić dużym drukiem oraz w innych językach

Punjabi:
ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਿਚ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਿਚ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

Urdu:
دو سری زبانوں اور بڑی اگر آپ کو ہی معلومات سمجھنے کے لیے مدد کی ضرورت ہے تو
یئچھپا یمں یبھی ابیدست ہو یسکت ہے براۓ مہر یبان پو ےیچھوی۔ معلومات

Arabic:
مطبوعة بأحرف كبيرة و بلغات إذا كنتَ تريد مساعدةً في فهم هذه لمعلومات يُرجى أن .تطلب
أخرى يمكن توفير هذه المعلومات

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