Having a sentinel lymph node biopsy and wide excision for melanoma

This leaflet has been given to you to help answer questions you may have about sentinel lymph node biopsy and wide excision. It explains what each surgical procedure involves and the benefits and risks of having them. If you have any further questions or concerns, please feel free to speak to a member of your hospital team who would be happy to help.

What is a sentinel lymph node biopsy?
A biopsy is when a sample of body tissue is taken and looked at under a microscope to identify the cells and see how they are behaving. A sentinel lymph node biopsy is an optional surgical procedure to remove one or more nodes (glands) from your lymphatic system. These are then examined under a microscope. The procedure is done to see if there has been a spread of a small number of melanoma cells to those nodes. The cancer cells can be so small that they cannot be felt or seen on a scan, and so the sentinel node biopsy is the most accurate way of detecting any spread of the melanoma cells.

What is the lymphatic system?
It is a system of channels in your body, which drain fluid from your tissues. Melanoma cells have been shown to spread mainly through these channels. Lymph is a milky fluid and is rich in white cells which help us fight infections. It circulates around your body by passing through tiny, then larger, vessels and lymph nodes.

Lymph nodes are arranged in groups (sometimes called draining basins). They are found in your groin, under your arms and in your neck, as well as being deeper in your abdomen and chest. Each area of skin will drain lymph fluid into certain nodes, usually the group of nodes or draining basin which is 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.

What does a sentinel lymph node biopsy involve?
It involves the removal of 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 in your right leg, the sentinel lymph node is likely to be in your right groin, or 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 Guy’s and St Thomas’ plastic surgeon, who is part of the specialist melanoma multidisciplinary team (MDT).

**What is the melanoma MDT?**
This is a team of health professionals who specialise in different areas of patient care, consisting of dermatology (skin), surgery, pathology (disease), oncology (cancer treatment), radiology (x-rays), psychology (mental health), 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.

**Consent – asking for your consent**
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 that you understand what this involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

**What happens before the sentinel lymph node biopsy?**
You will be asked to come to hospital the day before, or on the day of, your biopsy operation, for a scan called lymphoscintigraphy. This finds the lymph node(s) for your operation. It is done in the Nuclear Medicine Department.

You will be asked to lie down, and small injections containing a substance called a ‘tracer’ is 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 (a gamma camera). 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/are 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 his incision (cut) in the right place when you have your biopsy.

This scan normally takes about 90 minutes, or sometimes longer, depending on where the melanoma is and where the lymph nodes involved are. Afterwards you will be asked to go to the operation reception area (Day Surgery Unit or Surgical Admissions Lounge) or ward.

**What happens during the sentinel lymph node biopsy?**
The biopsy is performed under general anaesthetic. This is a medicine that makes you unconscious (asleep) so you are not aware of the procedure. There can be risks involved with having a general anaesthetic but they are small. Before coming to hospital for your operation you should have been seen in the pre-op assessment clinic by a nurse, to help find anything that might cause a problem for your anaesthetic. When you come for your operation an anaesthetist will see you before the biopsy to make sure you are fit enough for a general anaesthetic.

You should also receive a copy of the leaflet **Having an anaesthetic**. If you have not, please ask your doctor or nurse for a copy.
Do not eat anything for six hours before your operation. You may drink water up to two hours before your operation.

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

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.

Your surgeon will also perform a wide excision (removal of tissue from around the melanoma).

**What is a wide excision?**

A wide excision is an operation to remove more tissue around the site of the melanoma; even if the melanoma has been removed completely by the first operation (the skin biopsy).

Wide excisions are important as they remove any stray cancer cells which may have been left behind. This lowers the risk of a melanoma returning in the future. Your doctor will discuss with you how much skin needs to be removed, as the recommended amount depends on the thickness of the melanoma.

Wide excisions are normally done at the same time as the sentinel lymph node biopsy. Your surgeon will talk through how they will remove the extra tissue and how your wound will be repaired afterwards.

Sometimes this involves moving skin around next to the wound to cover it (a skin flap). Or taking skin from somewhere else, such as your thigh, to cover the wound; this is known as a skin graft.

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

Sentinel lymph node biopsy is not a treatment, but it does give us more information about the stage (progression) of your disease. It provides you and your doctor with the most accurate information about the risks from your melanoma. Please read carefully the leaflet Melanoma: sentinel lymph node biopsy – yes or no?

**Are there any risks with this surgery?**

- **Infection.** As with all operations, there can be a risk of infection. The surgeon and your medical team 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 get better. If you notice signs of infection, such as inflammation (swelling), or your wound becomes very red and hot, or you have a raised temperature, please contact your GP, the plastic surgery dressing clinic or Somerset Ward. 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 it drained with a needle.
- **Stiffness** or limited movement in the affected arm or leg afterwards is common and will improve when the wound heals. Your medical team will tell you how and when to move the limb.
- **Scars.** Treatment for melanoma requires different surgical methods such as incisions (cutting), excisions (cutting out), skin flaps and skin grafts, so it is quite common to have scarring left on your skin. Your surgeon and nursing team will advise you about skin care before you go home.
- **Discomfort.** You may experience some discomfort afterwards. This will improve as your wounds heal. Your doctor will prescribe painkillers to help ease any pain.
- **Numbness or tingling around the wound.** This should return to normal as your body heals. If you become worried, please contact your medical 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 of 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 a doctor or specialist nurse. It is usually temporary, but in some cases, permanent. There are lymphoedema specialists available at Guy’s and St Thomas’ who can help you manage and improve symptoms of lymphoedema. Please ask your medical team to refer you to the lymphoedema specialists, if needed.

If you are worried about any of these risks, please talk to a doctor or nurse involved in your care.

**What happens if I decide not to have this surgery?**
Sentinel node biopsy is not a treatment for melanoma, but is done to gain more information. If you would prefer not to have this done, you do not have to. This decision does not affect your treatment in any way. You will still be offered a wide excision of the melanoma alone, which is standard treatment for melanoma and it is likely your doctors will advise you to have this. You will also be offered regular follow-up appointments, so you can be monitored by the melanoma team.

**What happens after the procedure?**
You may be able to return home the same day, or the day after your operation. The anaesthetic may make you clumsy, slow and forgetful for about 24 hours. Although you may feel fine, your thought processes, reflexes, judgment and coordination can be affected for 48 hours after the operation.

The affected area is likely to have dissolving stitches and be covered by a dressing. You will be advised how to care for your wound before leaving the hospital. If needed, the ward staff will arrange an appointment for you to attend the plastics dressing clinic or for a plastic surgery outreach nurse to visit you at home to help care for your wound.

After going home, it is important you see your doctors again to discuss the operation results and arrange follow-up care. You will have outpatient appointments in the Melanoma Clinic within three weeks of your operation. Please ask the ward staff to check appointment(s) have been made before leaving.
What happens to the lymph nodes when they have been removed?
The sentinel lymph nodes are sent to our laboratory to be examined under a microscope. This takes 10 to 14 days. The results will be discussed with you during your next clinic appointment. Your surgeon, dermatologist or specialist nurse will be happy to discuss this in more detail.

What happens if the sentinel node contains melanoma cells?
If the sentinel node contains melanoma cells, your doctor will discuss your treatment options with you. This will help you to make an informed decision about what treatment to have. This could involve an operation called a complete lymphadenectomy or lymph node clearance, where the remaining lymph nodes are removed from the affected area and examined in our lab. The results and any further treatments would then be discussed with you. Alternatively, you may be offered a place on a clinical trial. Whichever treatment you have, your progress will be monitored with regular appointments in the Melanoma Clinic.

What happens if the biopsy does not contain melanoma cells?
If the sentinel lymph node does not contain any melanoma cells, you will not need any further surgery. You will still need regular hospital appointments so we can closely monitor you. These appointments are usually shared between the Guy’s Hospital Melanoma Clinic and the hospital or dermatologist that referred you to us.

What research and clinical trials options are there?
Doctors and medical researchers are trying to improve the investigation and treatment of melanoma. You may be offered the chance to take part in a research or clinical trial.

You do not have to take part and, if you decide not to, this will not affect your care in any way. Your surgeon or dermatologist will discuss this with you if you are suitable. Please do not hesitate to talk to your surgeon, dermatologist or oncologist if you would like more information on research or clinical trials.

Contact us
At different times you may need to contact different members of the team or departments in the hospital. Here is a list of useful contact numbers. If you have any questions or concerns, please do not hesitate to contact a member of the team.

Your clinical nurse specialist (CNS) is available for support and advice, and can also help by liaising between patients, relatives, GPs and hospital doctors.

CNS support is available for patients as soon as they’ve been diagnosed. t: 020 7188 4901
Patient pathway coordinator for melanoma clinic appointment help
 t: 07918338718 (Monday to Friday, 9am to 5pm except Wednesday 8am to 4pm)
Plastic surgery consultants t: 020 7188 5130 (Monday to Friday, 9am to 5pm)
Plastic Surgery Admissions for operation date and hospital admission help
 t: 020 7188 8882 e: dlPlasticSurgeryAccessTeam@gstt.nhs.uk
Somerset Ward for immediate post-discharge from hospital emergency t: 020 7188 6558
Plastic dressing clinic nurses for wound care advice and follow-up wound assessment
 t: 020 7188 7188 Ext 54518 (Monday to Friday, 9am to 5pm)

Guy’s and St Thomas’ hospitals offer a range of cancer-related information leaflets for patients and carers, available at www.guysandstthomas.nhs.uk/cancer-leaflets. For information leaflets on other conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the clinical nurse specialist or other member of staff caring for you or call our helpline.
t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS)  e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)  e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
t: 020 7188 8815  e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.
w: www.nhs.uk
# Option Grid™ – Melanoma: sentinel lymph node biopsy

Use this grid to help you and your healthcare professional discuss whether or not to have sentinel lymph node biopsy. It contains information about the procedure, advantages, disadvantages, and information about prognosis which some people may not want to have at this time.

<table>
<thead>
<tr>
<th>#</th>
<th>Having sentinel lymph node biopsy with follow-up</th>
<th>Follow-up without sentinel lymph node biopsy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What does it involve?</strong></td>
<td>Sentinel lymph node biopsy is an operation to see if the melanoma has spread to the lymph nodes (often called glands) nearest to the melanoma. This is usually done at the same time as removing more tissue from around the original scar, and usually under a general anaesthetic. You will also have regular follow-up checks.</td>
<td>Having regular follow-up checks to examine the lymph nodes.</td>
</tr>
<tr>
<td><strong>What might the results mean?</strong></td>
<td>For 80 of every 100 patients (80%), a sentinel lymph node biopsy will show no melanoma in the lymph nodes. Although this may be reassuring, some people may feel that the operation was unnecessary. If the sentinel lymph node biopsy shows no melanoma cells in the lymph nodes, the outlook is good and around 90 of every 100 people (90%) will be alive 10 years later. If the sentinel lymph node biopsy shows melanoma cells in the lymph nodes, the outlook is less good; around 70 of every 100 people (70%) will be alive 10 years later.</td>
<td>Does not apply.</td>
</tr>
<tr>
<td><strong>Is my chance of being cured changed?</strong></td>
<td>No. Having the sentinel lymph node biopsy does not change your chance of being cured.</td>
<td>No, choosing not to have a sentinel lymph node biopsy does not change your chance of being cured.</td>
</tr>
<tr>
<td><strong>What are the advantages?</strong></td>
<td>A sentinel lymph node biopsy result will show if the melanoma has spread to the lymph nodes, and indicates the chance of future spread. Knowing more about whether the melanoma is or is not likely to spread can be helpful. Having a sentinel lymph node biopsy may allow you to take part in clinical trials of new treatments for melanoma. If a sentinel lymph node biopsy shows melanoma cells in the lymph nodes, you may be offered an operation to remove the rest of the lymph nodes (see &quot;Malignant melanoma: completion lymphadenectomy – yes or no?&quot; Option Grid™ decision aid).</td>
<td>Not having a sentinel lymph node biopsy means that you do not have an operation and the risks that come with it.</td>
</tr>
<tr>
<td><strong>What are the disadvantages?</strong></td>
<td>As with any operation, there are risks from the procedure and from the general anaesthetic. Up to 10 of every 100 people (10%) who have a sentinel lymph node biopsy experience a problem, which could include infection and swelling, but most of these problems do not last long. In 20 of every 100 patients (20%) who have not had a sentinel lymph node biopsy, the melanoma will eventually spread to the lymph nodes. This would normally be found when you have a follow-up check. The operation to remove the lymph nodes at this stage may be more difficult with more complications.</td>
<td>Some clinical trials of new treatments cannot accept people who have not had a sentinel lymph node biopsy.</td>
</tr>
</tbody>
</table>

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