Sentinel Lymph Node Biopsy
This booklet has been written as a guide for anyone thinking about having a Sentinel Lymph Node Biopsy for Melanoma. Your Healthcare team will give you more detailed information as you need it, and will answer any questions and address any concerns you may have.

What is a Sentinel Lymph Node Biopsy?

A lymph node is part of the lymphatic system of the body. The lymphatic system is a network of vessels that carry clear fluid called lymph around the body, lymph vessels lead to lymph nodes that are found in the neck, armpit, groin, chest and abdomen. The first lymph node in a group that receives lymph from a particular area of the body is called the sentinel node. Any cancer that becomes loose moves through the lymph vessels to the sentinel node where it gets trapped and may start growing. If the cancer grows the node can be felt. In the early stage, when there are relatively few cancer cells, the lymph nodes cannot be felt through the skin and it is not possible to tell if the cancer has spread or not.

If the sentinel node that drains the primary cancer area is removed by surgery and examined under a microscope this early spread can be identified or ruled out. This is a Sentinel Lymph Node Biopsy. The surgery to remove the sentinel node is carried out at the same time as the wider local excision.

Why do a Sentinel Lymph Node Biopsy in Melanoma?

Biopsy of the Sentinel lymph node is the only reliable method for finding out if the Melanoma has spread to the lymph nodes when Melanoma is first detected.

If the biopsy does not show any Melanoma cancer cells in the node it usually means that the cancer has not spread from the primary site and the chance of it coming back is low. This gives most people a sense of reassurance and relief.

If the biopsy does show Melanoma cancer cells this means that the cancer has spread and the chance of it coming back is higher (all the lymph nodes in that group will need to be removed by further surgery).
There is no hard evidence to show that a Sentinel Lymph Node Biopsy gives a definite survival benefit. It should be regarded as a diagnostic test providing knowledge about the spread of cancer.

**Should I have a Sentinel Lymph Node Biopsy?**

The decision is yours. If this test is applicable for your Melanoma your specialist will discuss the procedure and the side effects in detail. As this is a diagnostic test you have to make an informed decision whether or not you would like to have it done. Take your time to get as much information as you need.

<table>
<thead>
<tr>
<th>Possible Advantages of Sentinel Lymph Node Biopsy</th>
<th>Possible Disadvantages of Sentinel Lymph Node Biopsy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operation helps to find out whether the cancer has spread to the lymph nodes. It is better than ultrasound scans at finding very small cancers in the lymph nodes.</td>
<td>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.</td>
</tr>
<tr>
<td>The operation can help predict what might happen in the future. For example, in people with a primary Melanoma that is between 1 and 4mm thick:</td>
<td>The result needs to be interpreted with caution. Of every 100 people who have a negative sentinel lymph node biopsy, around 3 will subsequently develop a recurrence in the same group of lymph nodes.</td>
</tr>
<tr>
<td>• around 1 out of 10 die within 10 years if the sentinel lymph node biopsy is negative; and</td>
<td></td>
</tr>
<tr>
<td>• around 3 out of 10 die within 10 years if the sentinel lymph node biopsy is positive.</td>
<td></td>
</tr>
<tr>
<td>Possible Advantages of Sentinel Lymph Node Biopsy</td>
<td>Possible Disadvantages of Sentinel Lymph Node Biopsy</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>People who have had the operation may be able to take part in Clinical Trials of new treatments for Melanoma. These trails often cannot accept people who haven’t had this operation.</td>
<td>A general anaesthetic is needed for the operation.</td>
</tr>
<tr>
<td></td>
<td>The operation results in complications in between 4 and 10 out of every 100 people who have it.</td>
</tr>
</tbody>
</table>

**How is the Sentinel Lymph Node Biopsy done?**

Before your operation a small amount of radioactive tracer is injected near the site of the primary Melanoma. You are then positioned under the scanner. The tracer moves from the primary site to the lymph nodes, this is seen on the scanner and recorded. The first node to take up the tracer is the Sentinel node (there may be more than one node). The radiation dose from the procedure is very low, similar to a spinal X-ray.

The operation to remove the Sentinel Node is done under general anaesthesia. While you are asleep a blue dye is injected into the area of the primary Melanoma. The dye travels through the lymph vessels and is taken up by the Sentinel Node. The blue colour of the node/nodes helps in locating them. The node/nodes are removed through a small cut in the skin at the area marked during the scan.

The wider excision of the primary Melanoma is done during this operation.

The removed node or nodes are examined under a microscope by the histo-pathologist. It takes about two weeks for this to be reported.

The removed node or nodes are examined under a microscope by the histo-pathologist. It takes about two weeks for this to be reported.
What are the side effects of the Sentinel Lymph Node Biopsy?

As with any surgery there is a small risk of bleeding, collection of fluid in the wound and wound infection.

The scar from the surgery may become itchy and lumpy, this is unlikely.

A small number of patients may have an allergic reaction to the blue dye.

There is a very slight risk of developing lymphoedema or swelling due to poor drainage of lymph in the arm or leg.

Urine may be blue or green after surgery due to the dye used. This clears up in a day or two.

Surgery is done under general anaesthetic, although it is very safe complications may occur. You will have a pre-operative assessment before your surgery where you can discuss any concerns.

After the Sentinel Lymph Node Biopsy

Following the surgery there may be some slight pain, this can be controlled with mild painkillers.

You will be seen in the Dressing Clinic or at your GP practice about a week after surgery.

You may feel rather tired and should spend the first week taking it easy.

You will be able to drive once you feel safe to do so, for most people this will take about two weeks.

If you need a sick note please ask, you will be able to work again once you feel able.

Once the histology (report) is ready we will send you an appointment
to be seen in clinic. If no cancer cells were found in the sentinel node then you will not need any further surgery at this stage. However, there is a small risk of the Melanoma coming back and you will have follow up appointments at Southmead Hospital.

If Melanoma was present in the sentinel node then you will be advised that all the remaining lymph nodes in that area are removed. We will discuss the option of this surgery (completion lymphadenectomy) in detail.

<table>
<thead>
<tr>
<th>Possible Advantage of Completion Lymphadenectomy</th>
<th>Possible Disadvantages of Completion Lymphadenectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing the rest of the lymph nodes before cancer develops in them reduces the chance of the cancer returning in the same part of the body.</td>
<td>Lymphoedema (long-term swelling) may develop and is most likely if the operation is in the groin and least likely in the head and neck.</td>
</tr>
<tr>
<td>The operation is less complicated and safer than waiting until cancer develops in the remaining lymph nodes and then removing them.</td>
<td>In 4 out of 5 people, cancer will not develop in the remaining lymph nodes, so there is a chance that the operation will have been done unnecessarily.</td>
</tr>
<tr>
<td>People who have had the operation may be able to take part in Clinical Trials of new treatments to prevent future Melanoma. These trials often cannot accept people who have not had this operation.</td>
<td>There is no evidence that people who have this operation live longer than people who do not have it.</td>
</tr>
<tr>
<td></td>
<td>Having any operation can cause complications.</td>
</tr>
</tbody>
</table>

You will have the contact details of your Keyworker, one of the Skin Cancer Clinical Nurse Specialists. We advise you to contact them if you have any concerns.
References and further Information

NGS Macmillan Wellbeing Centre,
Southmead Hospital,
Bristol BS10 5NB
Southmead Hospital has a drop-in centre offering a variety of activities/services. For more information telephone 0117 4147051 or ask your Skin Cancer CNS.
Wellbeing Course

Skin Cancer Research Fund (SCaRF)
Based at Southmead Hospital
Telephone: 0117 4148755

Macmillan Cancer Support
Europe's leading cancer information charity with over 4,500 pages of cancer information, practical advice and support for cancer patients, their families and carers
Telephone: 0808 800 1234

CancerHelp
CancerHelp UK is a free information service about cancer and cancer care for people with cancer and their families.
www.cancerhelp.org.uk
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.


How to contact us:

Skin Cancer Clinical Nurse Specialists

Rachel Sinclair
0117 414 7454

Lynda Knowles
0117 414 0507

Joanne Watson
0117 414 7455

www.nbt.nhs.uk/skin