Dynamic Sentinel Lymph Node Biopsy

Information for patients
This leaflet aims to give you information about having a Dynamic Sentinel Lymph Node Biopsy.

Dynamic sentinel lymph node biopsy is an improved method of detecting whether the nodes in the groin are involved with the tumour. It can mean less groin surgery is needed and less potential complications.

**We will explain about:**
- A Brief overview of the lymphatic system
- What is a Sentinel Lymph Node?
- Why you need to have them removed
- What to expect
- The aftercare that you will need.

If you read any words or phrases that you do not understand, please ask a member of your specialist team, usually your Clinical Nurse Specialist. It does not matter how many times you ask.

If you have any special needs (physical, religious, cultural, emotional or medical), please inform a member of staff so every effort can be made to meet your individual needs.

**The Lymphatic System**

Within the human body there is a special type of drainage system, known as the lymphatic system. This is made up of a number of lymph nodes located all over your body which are connected through a chain system.
Fluid known as lymph is transported through this system, draining excess fluid and cells that are no longer required, acting as a filter.

Many kinds of cancers are spread through the lymphatic system; this is particularly cancer of the penis, particularly within the groins.

What is a Sentinel Lymph Node?

A sentinel lymph node is defined the first node in the groin that cancer could spread to.

To locate this node, specialist scanning equipment is used, alongside a small safe dose of radioactive material.

This will then travel the path any potential cancer cells would take: from the penis, to the sentinel lymph node. This is then removed and sent for testing.

How can a Sentinel Lymph Node biopsy help?

The sentinel lymph node biopsy removes a single, sometimes 2-3 lymph nodes from each groin, which is then examined in the laboratory. If there is no cancer present then you will not need any further treatment. However if cancer is present then you will need further surgery to remove all the lymph nodes in that groin. (Further information will be provided regarding this at your clinic appointment).
The Procedure: The procedure is a 2 part process

Part 1
This involves attending the Nuclear medicine department, where the radioactive material is administered.

When you attend, a practitioner will apply a small amount of local anaesthetic to your penis. Following this, four injections of a small dose of radioactive material are injected into four areas at the tip of the penis. You will then have a number of images taken to locate the sentinel node. Once the sentinel node has been identified, a mark will be applied on your skin to help the surgeons identify the sentinel node.

Part 2
• This is where the sentinel lymph node is surgically removed.
• This is generally performed under a general aesthetic.
• The surgeon will make a slight incision by the mark on your skin.

In order for the surgeon to accurately locate the lymph node, a blue dye is injected and the surgeon uses a device that detects radioactivity to find the sentinel node. Once this is located, a slightly deeper incision is made to remove the node/s.

Dynamic sentinel lymph node biopsy is an improved method of detecting whether the nodes in the groin are involved with the cancer. It can mean less groin surgery is needed and less potential complications.
What are the risks of having this type of biopsy?

All procedures and treatments have risks and we will talk to you about the risks involved in this biopsy.

When you are admitted to the hospital, you will have your scan in the Nuclear Medicine department. There is a possibility of discomfort at the time of the initial injection for this scan, although local anaesthetic can be used to reduce this discomfort. As you are having the radioactive injections you will be observed closely for any reaction. In our experience the risk of the injection causing an allergic reaction or later long term problems is extremely low and is no more risk than having a normal chest X-ray.

You will then go to theatre to have the biopsy itself.

Pain
You may experience some discomfort following your operation. We will give you pain killers to take home with you and we would advise you to take them as they have been prescribed for you. Please do not exceed the stated dose on the pack. Generally, the discomfort in the groins will take a few weeks to go away, but if it does not and you are worried please see your GP or the team here at St James’s University Hospital.

Bleeding
You should not experience any major bleeding. It is perfectly normal to have a slight ooze or blood on your dressing. If you have any heavier bleeding, use a clean piece of gauze and apply firm pressure to the area for approximately ten minutes. If this does not stop, please seek medical advice. Please keep your wound as clean and as dry as possible.
**Swelling/bruising**
You may experience slight swelling and bruising after surgery. Occasionally, the swelling may be quite noticeable as you may have a build-up of lymph fluid under the skin. This will usually settle of its own accord, but if it becomes hot and red to touch or you have a smelly discharge, this could mean you have an infection. If this happens please seek medical advice.

The blue dye may make the colour of your urine blue/green and could also make your skin turn a slight grey colour. These side-effects are temporary.

**Need for further surgery**
The procedure aims to diagnose whether cancer is present in the main node. If cancer is present, the team will suggest removing further nodes in that groin to make sure that there are no further cancer cells remaining.

**What will happen if I choose not to have this type of biopsy?**
The alternative to a sentinel node biopsy is to have a scan. However scans such as CT, MRI and ultrasound are not accurate enough in excluding cancer spread to your groins. The only way to be sure is to have surgery on these nodes. Sentinel node surgery is the least invasive of the different types of surgery and we would usually recommend this as the best approach.
What alternatives are available?

If you have a lower grade cancer, examining your groins on a regular basis may be enough, however, if your cancer is of a higher grade we may need to perform a more extensive lymph node sampling.

Your case will have been discussed at our multidisciplinary meeting (a meeting involving specialist doctors, oncologists, radiologists and a histopathologist) where the safest and most appropriate management for your care will have been agreed.

Asking for consent

For all procedures which directly involve you as the patient, the law requires us to ask you for your consent so that we can carry out these procedures. You will need to sign a consent form to confirm that you agree to proceeding with procedure identified and that you understand what this involves. The risks, benefits and alternatives will be discussed with you before you are asked to sign. At any time, if you are not sure of any details about your procedure, please do not hesitate to ask a member of your team.
How should I prepare for dynamic sentinel node biopsy?

There are two slots for the dynamic sentinel node imaging, Thursday afternoon and Friday morning.

If you are given a date for the Thursday afternoon session, you will not need to starve that day. You will spend an overnight stay in the hospital and your actual operation will be on the Friday morning, you will need to starve from midnight.

If your imaging has been set for the Friday morning, you attend surgical admission lounge in the morning, escorted to the nuclear medicine department. Your operation will be scheduled in the afternoon, and you will need to starve from midnight and drink water only up until 10am.

What should I expect after the procedure?

If you live nearby you may be able to be discharged on the same day as your surgery, providing you have a family member/ friend to stay with you for 24 hours. If you live further away, you will stay in the hospital for one night.

You will be asked to attend the hospital for a routine appointment approximately 2-3 weeks later for a wound check and to discuss the results of the biopsy. Please keep your wound clean and dry as possible. You will be sent home from hospital with a dressing covering the site of the wound.

Surgeons can often have different approaches to closing the wound. You will need to check before discharge whether you have dissolvable sutures or surgical clips, as arrangements will need to be arranged to remove these.
You will be able to shower, however we do advise you not to soak in a bath until your review in clinic. Please avoid soap directly on to the wound and make sure that you pat your wound dry following your shower.

You may notice some swelling and bruising at the wound site of the first few weeks. This is normal, however if you experience increased pain, redness, a discharge from the wound or you feel unwell, please contact your nurse key worker on the number at the back of this leaflet. For out of hours emergencies, please attend your local or nearest Accident and Emergency Department.

It is advisable to wear loose fitting clothing for the first four weeks. Avoid belts and tight trousers as this could increase the swelling you experience.

Contact us

St James’s University Hospital, Leeds Teaching Hospitals
• Switchboard: 0113 243 3144
• Website: www.leedsth.nhs.uk

Joan Carter;
secretary to Mr Eardley / Mr Kayes / Mr Elmamoun
• Telephone: 0113 206 6994

Victoria Washington Uro-Oncology Clinical Nurse Specialist
• CNS Team Telephone: 0113 206 4594
• CNS secretary: 0113 206 6792
Leeds Cancer Support

Leeds Cancer Support complements care provided by your clinical team. We offer access to information and a wide range of support, in a welcoming environment for you, your family and friends.

We can be found in the information lounges in Bexley Wing and also in the purpose built Sir Robert Ogden Macmillan Centre.

The Sir Robert Ogden Macmillan Centre

The Centre is on the St James’s Hospital site and offers a variety of support services including counselling, support groups and complementary therapies. These therapies include Reiki, relaxation and visualisation, hand and foot massage and many others. You can just drop in for a coffee and a chat anytime. Open from 10am - 4pm Monday to Friday.

Health Talk support service

Health talk is an online service where you can find information and support by seeing and hearing patients real life experiences.

In co-ordination with researchers from the Centre for Men’s Health at Leeds Metropolitan University spoke to 27 men in their own homes. You can explore what these people felt about issues such as symptoms, treatment, body image and sex. We hope you find the information helpful and reassuring.

http://www.healthtalk.org/peoples-experiences/cancer/penile-cancer/topics
Contact numbers for Leeds Cancer Support

Information Centre, Level 1 Outpatients Department
• Open from 10am - 4pm. Telephone: 0113 206 8816

Information Lounge Level -2 Radiotherapy Department
• Open from 8.30am - 4.30pm Telephone: 0113 206 7603

Sir Robert Ogden Macmillan Centre
• Open from 10am - 4pm. Telephone: 0113 206 6498

All the above services can be emailed on:
• leedsth-tr.cancersupport@nhs.net

Where can I find more information?

Orchid
• www.orchid-cancer.org.uk

Macmillan Cancer Support
• www.macmillan.org.uk

References
• EAU penile cancer guidelines 2009