Urology department

Sentinel node biopsy - surgery for cancer of the penis

This information is intended for men who have had treatment for cancer of the penis. A sentinel node biopsy is surgery which will show whether the cancer has spread to the groins.

Agreeing to treatment
We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie’s written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you.

Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.

What are lymph nodes?
Lymph nodes are glands that lie in groups around the body, for example, in the neck, armpits, abdomen (tummy) and in the groins. Each group of nodes receives lymph fluid from a specific area of the body. The lymph nodes in the groin receive lymph fluid from the lower half of the body.

Part of the lymph nodes’ job is to collect infected cells, or cancer cells that have broken away from the main tumour (cancer) and travel in the lymph fluid. This causes a swelling of the nodes. Sometimes this swelling can be seen on a scan, or felt when you are examined. Occasionally, there can be cancer cells in the nodes which cannot be seen or felt.

If the lymph nodes are affected by cancer cells then treatment with surgery is usually recommended. Sometimes the specialist doctor may recommend removing the lymph nodes even when there is nothing abnormal on the scan or on examination but there is a high level of suspicion that the lymph nodes could be involved.

What is a sentinel node?
This is a gland that drains lymph fluid from a specific part of the body and is thought to be the first gland to be reached when cancer spreads. By locating it with special scanning equipment we can then remove it and test it for cancer cells. This method is called dynamic sentinel node biopsy. A radioactive tracer and scanner images are used to locate the sentinel node.
What are the benefits of treatment?
By having a sentinel node biopsy you may avoid having more extensive surgery to your groins. If the results of the groin node biopsy are negative then it is unlikely that you will need further treatment for cancer of the penis.

What are the risks of the operation (short and long term)?
There is a small risk that the wounds could get infected, which may need treating with antibiotics. The amount of discomfort is mild. Occasionally lymph fluid may accumulate under the skin where the gland has been removed. This should not cause any major problems and, although you could need to attend The Christie as an outpatient, the fluid can be easily removed with a fine needle and syringe. The radiation dose from the procedure is very low (similar to having a pelvic X-ray).

Are there any alternatives to the operation?
We recommend this operation as there are no equivalent alternatives. We could continue to monitor your condition in the outpatient department. However, if it becomes possible to feel a lymph node(s) on follow-up then treatment to remove those nodes may not be as successful as removing them before it is possible to feel them. The outlook can be poorer if we just observe the glands.

What will happen if I do not have the operation?
We would continue to monitor you in the outpatient department. These appointments would include a physical examination to see if the surgeon can feel any enlarged lymph nodes in your groins. There may also be a need to repeat scans similar to the ones you may have had carried out before.

What exactly is done at the time of the operation?
We will ask you to come into hospital on the day before the operation. On this day you will attend the nuclear medicine (radioisotopes) department to have another scan. This is called a dynamic sentinel node scan. It is used to detect the main glands in your groins which we think are the first glands to be involved if your cancer spreads.

After having a local anaesthetic spray, you will have an injection of a small amount of very slightly radioactive dye into three separate places around your penis. We will then take a series of pictures with a special camera that detects the tracer, over a period of approximately two hours. These pictures will show the site of the sentinel node in both right and left groins. This site, in each groin, will be marked on the skin with a pen.

On the day of surgery, we will give you a general anaesthetic and a harmless blue dye will be injected into the same three sites of the penis as on the previous day. The dye will be absorbed into the lymph nodes and will help us identify the sentinel lymph node. During the operation we will use the pictures from the previous day’s scan, the marks on your skin and a smaller scanner to detect the sentinel node.

There are some occasions when we are able to offer the operation to be done on a single day. (This is known as a 1 day protocol). In this case, you will receive the 2 stages described in the paragraphs above on the same day. Due to theatre scheduling this 1-stage process is not available to everyone.

How will my body be affected by the operation?
There will be a small scar in each groin. You may also develop some temporary swelling in the groin areas due to a collection of lymph fluid.
Admission to hospital for your operation
You will be admitted to the ward in the morning of the day before your operation in time for you to
attend the nuclear medicine (radioisotopes) department for the first part of the procedure. On occasions,
you may be admitted on the day of your surgery and have your procedure done as a day case.

There is no special preparation for the procedure in nuclear medicine (radioisotopes). After your visit to
the department you will be taken back to the ward.

When it is time for your operation, the nurses on the ward will give you a gown and check you are
ready. The nurses will also tell you about when to stop eating and drinking before your operation.

You will be taken down to the theatre suite where you will be given an anaesthetic and taken into
theatre.

After your operation
You will be taken to the recovery department for a short period of time and then transferred back to the
ward.

Preparation for home
You can go home later the same day if you are feeling well and if you have someone who can look after
you for the first 24 hours following the anaesthetic.

The dressings over your wounds can be removed 48 hours after the operation when you will be able to
bath or shower as normal.

You will have dissolvable stitches in your wound so they do not need to be removed.

Who to contact in case of illness
When you are at home, if you are concerned about the wound (during office hours), contact your key
worker. Or, if this happens after office hours, contact The Christie Hotline on 0161 446 3658 and they
will get in touch with the team who carried out the operation.

Follow up after sentinel node biopsy
We will make you a clinic appointment for about 3 weeks after the operation where you will be given
the results - whether the sentinel nodes contained any cancer cells.

If the sentinel nodes do not contain cancer cells then it is unlikely that you will need any further
treatment for cancer of the penis. However, we will still ask you to attend for follow-up appointments
and scans for up to 5 years after this.

If the sentinel nodes do contain cancer cells the surgeon will recommend that you have further surgery
called block groin node dissections which involves removal of all the remaining nodes in both groins.
There is written information available about this procedure.
Further information

Macmillan Cancer Support
Provides emotional and practical support to people affected by cancer and for general information about cancer, treatments and booklets as well as benefits information. You can ask to talk to a cancer information nurse specialist who can answer questions about cancer and treatments and what to expect.
Tel: 0808 808 0000 or visit www.macmillan.org.uk

Orchid ‘fighting male cancer’
Information about men’s cancers.
www.orchid-cancer.org.uk

Cancer Research UK
Cancer information available in 170 languages via an interpreter.
Tel: 0808 800 4040

healthtalk.org
You can watch or listen to videos of other people’s experiences of cancer.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard. If you would like to have details about the sources used please contact patient.information@christie.nhs.uk

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week