

Urology department

Robotic pelvic node dissection for penile cancer - unilateral (one side) or bilateral (both sides)

This information is for patients who are to have the procedure for a robotic pelvic lymph node dissection under general anaesthetic. It explains what is involved and the benefits and risks.

What are lymph nodes?

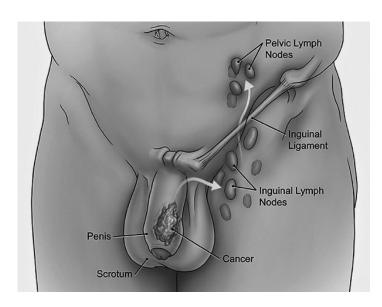
The lymphatic system is made up of hollow tubes similar to blood vessels called lymphatics which carry the lymph fluid around the body. The lymph nodes, or glands, lie in groups along the blood vessels around the body, for example in the neck, armpits, abdomen (tummy) and in the groins. Lymph nodes and lymphatics have a number of roles including:

- 1. Removing excess fluid from different areas of the body.

 For example, the legs are drained by the lymph nodes in your groins and pelvis
- 2. Immunity.
 Lymph nodes have an important role in fighting infections. Many of the cells that help fight infections live in lymph nodes.

Where are your pelvic lymph nodes?

The pelvic lymph nodes lie deep inside your lower abdomen between the hip bones. You cannot feel them even if they become enlarged.





© 2025 The Christie NHS Foundation Trust. This document may be copied for use within the NHS only on the condition that The Christie NHS Foundation Trust is acknowledged as the creator.

Why do I need to have the pelvic lymph nodes removed?

Lymph nodes also collect cancer cells that have broken away from the main tumour (cancer) and travel in the lymph fluid. This can cause swelling of the nodes. A scan known as a CT is sometimes used to look at the lymph nodes in the pelvis to see if they are enlarged. Unfortunately, unless the disease has grown significantly in the pelvis, the scan may not be able to detect small groups of cancer cells which may continue to grow unnoticed.

Due to the rare nature of penile cancer, the role of removing the pelvic lymph nodes is uncertain. Current advice recommends they should be removed when the pelvic lymph nodes on a CT scan appear normal but there are high risk features found on the inguinal lymph node dissection. These include:

- 2 or more positive nodes found in the inguinal/groin node dissection approximately 1 in 4 chance that the pelvic nodes will be positive
- extracapsular extension in the lymph nodes (where the cancer has managed to push its way out of the lymph node) approximately 6 in 10 chance the lymph nodes will be positive

In rare circumstances your surgeon will recommend that you have your lymph nodes removed if they are enlarged on the CT scan.

In some circumstances where the cancer is confirmed in your pelvis or has spread further than the pelvis, your team may offer you chemotherapy and/or radiotherapy in addition or instead.

What is a robotic pelvic node dissection?

The pelvic nodes can be removed through an incision in your tummy (known as open surgery), laparoscopically (keyhole surgery), or using a robot.

The advantages of using a robot potentially include:

- shorter hospital stays
- reduced pain
- reduced risk of infection
- less blood loss reducing the need for a transfusion
- less scarring
- laster recovery
- quicker return to normal activities such as driving

Robot assisted techniques give the surgeon:

- high quality vision
- 3D view of the operating field
- enhanced dexterity
- greater precision
- 6 to 10 times magnification





Fig 1a The surgeon's console

Fig 1b Robot with specialised arms

The da Vinci surgical system is a sophisticated robotic platform (see above). It consists of a surgeon's console (see Fig 1a) where the surgeon sits and carries out the operation. The specialised instruments are passed through keyhole openings in the tummy which are then connected to the specialised arms of the robot (see Fig 1b). The surgeon manipulates the instruments within the tummy with precision by moving the master controls at the console.

The surgeon can accurately remove the tissue containing your pelvic lymph nodes either on one side or both sides depending on the need.

Agreeing to treatment

The surgeon will have explained the operation and why you need it. The information in this leaflet is a permanent record of what has been explained. We advise you to read this information sheet before you sign the consent form which states that you are prepared to go ahead with a robotic pelvic node dissection.

Consent to treatment

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of this agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to ask any questions and discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treatment of 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 treatment. If you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you, although these will have been discussed with you already. For more information see below.

What are the risks of robotic pelvic node dissection?

All patients who undergo surgery have a risk of developing a complication and it is important that you are aware of what these may be. These may include:

Common side effects (more than 1 in 10)

No evidence of cancer

It is currently not possible for us to detect small deposits of cancer in the pelvic nodes. We therefore have to rely on features found in the cancer on your penis and groins to guide us on the risk of there being disease in the pelvic nodes. As a consequence, it is possible that you undergo this surgery only to find that there was no cancer there in the first place.

Wound and skin complications

The small wounds may open up and in rare cases the skin overlying the tissue that has been removed may lose its blood supply. As a consequence, the skin in that area may turn black and you may need further treatment or dressings to deal with it.

You might find that you get some temporary swelling of the penis and scrotum. This is a short-term effect of the surgery and should resolve in 2 to 3 weeks after the operation.

There is a small risk you may develop a hernia from one of the incisions in the future.

Lymphoedema

This is when the lymph fluid does not fully drain away from the tissues in the legs and scrotum causing swelling as the excess fluid builds up. Sometimes there may be numbness and discomfort caused by the swelling. The skin on the legs and scrotum also become more prone to infection.

Uncommon side effects (less than 1 in 10)

Lymphocele

A lymphocele is a collection of lymph fluid in the pelvis. This often resolves or is small. In rare cases it can be large enough to cause some discomfort. You may require a drain to be placed into it temporarily to help it disappear.

Bleeding/haematoma

You may find that after your operation you may have some mild bruising around the wound sites. There is a very small chance that during or after your operation there is significant bleeding. This might require a further transfusion and/or surgery to stop it depending on the individual situation.

Infection

As the procedure is performed by keyhole surgery, the tissues have less exposure to potential bacteria. If you get a wound infection, then it is likely you will need antibiotics and in rare circumstances another operation to drain any infected fluid.

Temporary slowing of the bowels (constipation and ileus)

In some patients entering the tummy cavity to remove the lymph nodes can cause the bowel to temporarily stop working properly. This can make you feel bloated and uncomfortable and in rare cases feel nauseated and vomit. It often resolves after a couple of days and in rare circumstances require a tube to be passed down your nose and into your stomach for a short period of time

Rare side effects (less than 1 in 100)

Changing to an open operation

In certain rare circumstances where there is bleeding that cannot be controlled during the operation, or there is concern that it is not possible to complete the operation safely your surgical team may decide to make an incision in your tummy and complete the operation in the traditional open method. We will discuss this with you after your operation if this is the case and explain the reasons why.

Anaesthetic issues

This can include chest infections, blood clots in the leg (deep vein thrombosis) or in the lungs (pulmonary embolism), strokes, heart attacks and death.

Obturator nerve injury

The obturator nerve runs through the tissue containing the lymph nodes that are removed. There have been a small number of reported cases where this has been damaged both in open and robotic surgery. This can lead to difficulty in crossing your legs while sitting and some instability when walking. You may also experience numbness on the inside of your thigh. This can be either temporary or permanent.

Injury to other structures within the pelvis

There are a number of structures that lie within the pelvis. These include the bladder, the ureters (the tubes urine pass down to get from the kidneys to the bladder), the bowel and the major vessels to and from the legs. The vast majority of injuries to these structures are recognised at the time of surgery and corrected, however sometimes they are only found once surgery is completed and you are recovering. In these cases the team will guide you on the best management strategy.

What other options do I have?

A multidisciplinary team (MDT) of health professionals including surgeons, oncologists, radiologists, pathologists and nurses will have discussed your case before offering you this operation. It is felt that this is the best course of treatment for you. The alternatives may include:

- Open pelvic lymph node dissection
 You may want to consider an open operation.
- Chemotherapy and/or radiotherapy
 There are other treatments that might be offered to you such as radiotherapy or chemotherapy which may be used in specific circumstances and the team can discuss these with you.
- No action and observation

 If you do not have any treatment for the cancer it may continue to grow. If nothing is done to stop the growth of the cancer then it could spread to other parts of the body which would then make it difficult to offer any treatment to cure the cancer. It is worth remembering however that a number of patients (between 1 in 3 and 2 in 3) will undergo this surgery to find that there was no cancer there in the first place.

What can I expect before, during and after my surgery?

Before surgery

About a week before the operation, we will ask you to attend the hospital for 'pre-op clerking'. This is where a nurse practitioner or doctor will check that you are prepared for the operation. The visit will include blood tests along with an examination of the chest, heart and abdomen. They will ask you questions about your general health, other previous illnesses and any medication or tablets you are taking. There will be an opportunity for you to ask questions or raise concerns at this time. The pre-assessment nurses will take a urine specimen to ensure that you do not have a urinary tract infection and they will also take some swabs from your nose, mouth and groin. This is to ensure that you are free from infection prior to your surgery.

If you are diabetic it is important to get your diabetes as well-controlled as possible to reduce the risk of infections and aid with your recovery.

Before the operation we will ask you to stop eating and drinking about 4 to 6 hours beforehand, apart from water that you can drink up to 2 hours before the operation.

You will be admitted on the day of the operation when you will meet some of the staff who will be looking after you during your stay in hospital. The ward staff will familiarise you with the routine of the ward and show you where the facilities are.

During the surgery

You will be given a general anaesthetic, so you will be asleep during the procedure.

Your tummy and the surrounding area will be shaved. Your tummy will then be marked with a permanent marker pen and 6 small cuts made in your tummy to allow the ports (small devices installed temporarily in the skin) to be placed to allow the surgical instruments to be inserted. The tissue is then cut out and removed via one of the incisions.

A catheter (plastic tube) may be placed in the water passage (urethra) to drain urine from the bladder for 24 hours whilst the wound heals.

A drain will be inserted into your tummy at the end of the operation to prevent any fluid build-up and prevent any blood pooling in the wound.

You will have small dressings over the 6 wounds.

After your surgery

When you come out of theatre you will be taken to the recovery area. The staff will monitor you to make sure your condition is stable then you will be ready to go back to the ward. When you get back to the ward you will be able to eat and drink.

Painkillers will be offered to you on a regular basis, as it is important that you feel as comfortable as possible after the operation. You will be able to get up and move around the ward as soon as you feel comfortable

The team will come and review you on the ward round between 8am and 9am (except Wednesdays when they come between 9am and 10am) to ensure that you have no issues and you are healing well. They will check your drain to see how much fluid it has collected.

Your drain will stay in until the team are happy to remove it. It is possible that you will go home with the drain(s) still in but the team will advise you on how to care for them prior to your leaving.

You will get injections in your tummy every evening to thin your blood and reduce the risk of deep vein thrombosis and pulmonary embolism. You will need these injections for 28 days in total including after you have been discharged. We will show you or a family member how to do this whilst you are with us. You will need to wear the TED. (thrombo embolic deterrent) stockings provided to you unless there is a specific medical reason not to.

The majority of patients stay between 1 and 3 nights; however if there are any concerns we may ask you to stay longer to ensure your safety and success of the operation.

You might notice that after your surgery your abdomen will be swollen. This swelling will reduce over the course of the next 3 to 4 days but, in the meantime, it's best to wear clothes that are loose-fitting around the waist.

What should I do once I am discharged home?

Bowels

After your operation it can take a few days for your bowels to return to normal. This may be due to changes in your diet while in hospital or because you are not as mobile as you were before. You will be discharged with a medication called lactulose to help prevent and relieve any constipation. If you find you are still struggling to move your bowels after a few days you should see your local pharmacist who will advise about stronger laxatives. Make sure you are drinking plenty of fluids and eating a well-balanced diet with 5 portions of fruit and vegetables per day.

Pain

Following your surgery, you may experience some discomfort. When at home please take the painkillers provided to you by the hospital pharmacy regularly, as directed on the packet. Do not exceed the stated dose. You should notice that the pain seems to settle after the first 3 to 7 days after the surgery. If you find that it persists after this please contact your GP.

Dressings

The ward nurses will arrange for a district nurse to come and visit you at home after your surgery to monitor your progress and ensure that your wounds have healed.

Please try and keep your wounds as clean and dry as possible. You can shower the day after surgery in the evening but do not soak for long periods until the wounds are completely healed. Try and avoid getting soap on the wounds, which can cause some irritation.

If the wounds get wet carefully dry them by patting with gauze but do not rub. Please do not touch the wounds with your hands unless they have been thoroughly washed.

Drains

If you have gone home with a drain in we will ask you to carefully measure how much it is producing over a 24 hour period and keep an accurate record. It is best to measure the amount drained at the same time every day (usually first thing in the morning). The nursing team at The Christie will keep in close contact with you and advise you whether the drain should come out or not. It may be possible for the district nurse to remove the drain under our advice. However this is not always the case and so you may have to return to The Christie for this to be done. (For more information please see The Christie information leaflet 'Going home with drains inserted').

Antibiotics

You will not routinely be given antibiotics to take home following your operation unless there is a compelling reason to.

Stitches

All the stitches used in your operation are dissolvable and do not need removing. They can take up to 6 to 8 weeks to completely dissolve.

Work

You will need approximately 6 weeks off work. We will provide you with a fitness to work certificate if required. Please note you can self-certify for the first week.

Outpatient appointment

You will be seen in clinic 10 to 14 days after your surgery to review your drain. If it has already been removed, we will see you in 2 to 3 weeks to review your wound and discuss with you the results of the surgery and if any other treatments are required.

What should I look out for after my operation?

Please contact The Christie Hotline on 0161 446 3658,

if you experience any of the following:

- persistent bleeding from the wound sites
- pain which is not controlled by the painkillers prescribed
- a fever of 37.5°C or higher
- swelling, redness and/or discharge from the wound
- black areas in the skin

Contacts

You may have other questions about issues not covered in this information sheet, please contact your key worker at The Christie who are Macmillan urology clinical nurse specialists:

Your urology nurse specialist is	
Phone	

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

Maggie's centres

Maggie's provides free practical, emotional and social support to people with cancer, their families and friends. Staff are on hand to offer the support you need to find your way through cancer, including information about treatment, financial advice, psychological support, relaxation and exercise classes and nutritional advice. Or simply to sit quietly with a cup of tea.

Maggie's Manchester

Contact Maggie's on 0161 641 4848 or email manchester@maggies.org

The Robert Parfett Building, 15 Kinnaird Road, Manchester M20 4QL

Maggie's Oldham

Contact Maggie's on 0161 989 0550 or email oldham@maggiescentres.org

The Sir Normal Stoller Building, The Royal Oldham Hospital, Rochdale Road, Oldham OL1 2JH

Cancer Research UK

Cancer information available in 170 languages via an interpreter. Call free on 0808 800 4040

Orchid

Provides support to patients with testicular, penile and prostate cancer and their partners/carers. Including on-line support groups. For more information visit **www.orchid-cancer.org** or phone: **0808 802 0010**.

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 **the-christie.patient.information@nhs.net**

For information and advice visit the cancer information centres at Withington, Oldham, Salford or Macclesfield. 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

October 2025 - Review October 2028 CHR/URO/1429/08.12.20 Version 2 The Christie Patient Information Service Tel: 0161 446 3000 www.christie.nhs.uk