INGUINAL LYMPH NODE DISSECTION FOR PENILE CANCER

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

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https://bit.ly/4238YCS

KEY POINTS

- The aim of this procedure is to remove the lymph nodes from one or both sides of your groin (inguinal region)
- It is performed either because abnormal lymph nodes have been found on clinical examination, or because cancer has been found on an earlier biopsy
- After reviewing the results from the lymph node(s) we remove, you may have no cancer or you may require additional cancer treatment

What does this procedure involve?

Lymph nodes are small glands which filter substances from the body and contain cells which help to fight infection. They can sometimes be infiltrated by cancer cells. In penile cancer, the groin and/or the pelvic nodes sometimes need to be removed.

The groin lymph nodes may need removal if they are abnormal on clinical examination or have been found to have cancer after a biopsy (or fine needle aspiration, FNA). A fine needle aspiration is where a sample of fluid is taken from a lymph node that feels or looks abnormal on a scan. The FNA is usually taken by an X-ray doctor using ultrasound guidance.

During the procedure, we first make an incision in your groin. We then remove the lymph nodes within a packet of fatty tissue and send them to

Published: Mar 2025
Review due: Aug 2026
Leaflet No: A25/194

the pathology laboratory for analysis. We usually insert a drain that may need to stay in place for a while. We close the incision with absorbable sutures or surgical staples. You may need a catheter to drain your bladder temporarily.

What are the alternatives?

- **Observation** – not usually advised unless you are not medically fit enough for surgery
- **Chemotherapy and/or radiotherapy -** not recommended but it may be offered in medically unfit patients or in specific circumstances.
- **Minimally invasive surgery (laparoscopic or robotic) -** this may be offered in some centres. It involves the use of simple or robotic-assisted keyhole surgery (laparoscopy). This method has the advantages of:
    - shorter hospital stays
    - reduced pain
    - reduced infection
    - less blood loss
    - quicker recovery
- **Modified inguinal lymph node dissection** - this may be used when there is a risk of cancer in the lymph nodes but the two biopsy methods (FNA and DSNB) are either unavailable or inappropriate. The procedure will determine if there is cancer in the groin lymph nodes in the groin. In the event that cancer is found, further surgery may be offered to remove any remaining lymph nodes on the side where cancer is found

What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear, and we may give you an injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

Details of the procedure

- we usually give you an antibiotic before the operation, after carefully checking for allergies
- we make an incision in your groin and locate the lymph nodes which are then removed within a packet of fatty tissue and sent for analysis
- we close the incision with absorbable stitches or staples; the staples need to be removed, at home, 7-10 days after the operation
- we usually put a drain in your wound and a catheter in your bladder
- we leave the drain in place until there is minimal drainage; this may take a prolonged period. As a result, you may need to go home with the drain, or the drain may need to be re-inserted after its removal
- once you are back on the ward, you will be allowed to eat and drink normally
- we normally remove your bladder catheter when you are fully able to walk around
- the operation may take up to three hours to complete
- you may need to be in hospital for up to 7 days.

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
Lymphoedema (swelling of the scrotum, penis or legs due to a build up of excess lymph fluid)	 Between 1 in 2 & 1 in 10 patients
Lymphocele (a collection of fluid in your groin)	 Between 1 in 2 & 1 in 10 patients
No evidence of cancer is found in the removed tissue	 Between 1 in 10 & 1 in 50 patients

Incomplete cancer removal which may require further treatment		Between 1 in 10 & 1 in 50 patients
Bleeding/haematoma requiring further surgery or blood transfusion		Between 1 in 10 & 1 in 50 patients
Wound infection or breakdown		Between 1 in 10 & 1 in 50 patients
Return to the operating theatre for re-operation for any reason		Between 1 in 50 & 1 in 250 patients
Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)		Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting *MRSA* or a *Clostridium difficile* bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

The skin in your groin will often feel tight and swollen for several weeks. You may also notice swelling of your genitalia (penis & scrotum) or leg(s). This is very common and usually resolves after several weeks. We would recommend light exercises for at least 6 weeks; walking is very beneficial. Elevating your leg(s), especially at the end of the day, or after exercise, is also beneficial for any swelling of the leg(s).

It usually takes up to 14 days until the results of the pathology analysis are available; these will be discussed in a multi-disciplinary team (MDT)

meeting before any further treatment decisions are made. We will let both you and your GP know the results.

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery

Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or

- ring the Smoke-Free National Helpline on **0300 123 1044**.

Driving after surgery

It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.

PLEASE NOTE: the staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.

Published: Mar 2025
Review due: Aug 2026
Leaflet No: A25/194