

Urology department

Cancer of the penis (penile cancer)

Causes of penile cancer

Penile cancer is a rare cancer. The exact cause of the disease is not known. However, there are some factors which appear to increase a man's risk of the disease:

- exposure to the Human Papilloma Virus (HPV) which is a cause of genital warts
- not being circumcised as a baby - it may be that men who find it difficult to pull the foreskin back to clean underneath get a build-up of irritants which can lead to cancer
- other skin conditions that affect the penis if left untreated can go on to develop into cancer - this is why it is important to report any changes in the skin on the penis, such as red, warty or white patches to your doctor.

Diagnosis

Your GP will have examined you and referred you to a urologist (a specialist doctor) for further investigations. Sometimes men are referred to a dermatologist (doctor specializing in skin diseases) or sexual health clinic as cancer of the penis may be difficult to diagnose because it is rare. A biopsy (sample of the abnormal patch of skin) will have been taken and analysed using a microscope to check for cancer cells. When cancer is detected the urologist will refer you to a specialist centre such as The Christie.

Further tests

When the biopsy confirms a cancer of the penis further investigations will usually be carried out to see whether the cancer is just affecting the penis or whether it has spread to any other parts of the body such as the lymph nodes. Investigations such as scans with ultra sound, CT (computerised tomography) or MRI (Magnetic Resonance Imaging) may be carried out. These help the team looking after you to advise you on the best type of treatment for you.

The lymph nodes (glands) lie in groups along the lymph vessels 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 from the lower half of the body. Part of the job of the lymphatic system in relation to the immune system 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.



Staging and grading

There are two main ways of staging or measuring how far the cancer has developed. Staging the cancer accurately is important as it affects the type of treatment offered.

Firstly, staging refers to how much cancer (or tumour [T]) there is present. This is determined by the biopsy and the scans:

T1 – the cancer only affects the skin covering the penis, the head of the penis (glans) or the foreskin

T2 – the cancer has begun to spread into the shaft of the penis

T3 – the cancer has spread deeper into the shaft of the penis or water passage (urethra)

T4 - the cancer has spread beyond the penis.

Secondly, the cancer cells are graded (**G**) from the biopsy test which gives us an idea of how quickly the cancer cells may develop:

G1 – slightly abnormal/ aggressive

G2 – moderately abnormal/ aggressive

G3 – very abnormal/ aggressive.

Treatments

The options for treatment we will offer you will depend on the staging of the cancer and on your general health. The treatments for cancer of the penis include chemotherapy ointment, surgery, radiotherapy and intravenous (into the veins) chemotherapy.

These treatments will be carried out at The Christie by the doctors specialising in penile cancer. There may be exceptional circumstances where treatments may be carried out in a hospital nearer to your home.

• Chemotherapy ointment

This is used for pre-cancerous growths. It is applied to the affected area(s) of the penis daily for 2 weeks. For the next two weeks it is not used – a rest period. Then it is used daily again for 2 weeks with another rest period of 2 weeks. This cycle is repeated one more time before a clinic appointment to review the situation.

• Surgery

The type of surgery offered will vary depending on how much of the penile skin/tissue needs to be removed.

If the cancer is confined to the foreskin then a circumcision may be all that is necessary. If the cancer is slightly larger than this it may be possible to offer a wide local excision. This means removing the cancer with a border of healthy skin around it. The healthy tissue is removed to reduce the chances of the cancer returning in that area.

Glans resurfacing (pre cancer or early superficial disease)

This involves removing some or all of the abnormal skin from the glans. A thin strip of skin known as a split thickness skin graft (STSG) is then taken from the thigh and used to cover the glans and replace the abnormal tissue. This is held in place with a special dressing and stitches. You will also have a catheter after the operation to prevent urine getting on the graft whilst it is healing.

Glansectomy (T1 disease) - This type of surgery is offered as a reconstructive procedure to restore a more normal appearance of the penis. It uses spare skin from the penis or a skin graft (a thin patch of skin from elsewhere on the body but usually an outer thigh), to cover the end of the penis after it has been removed. There is Christie information available 'Glansectomy'.

Removal of part of the body of the penis (partial penectomy) (T2 disease) - This operation is recommended if more than the head of the penis is involved with cancer. This operation is carried out

under a general anaesthetic. However, if you have significant heart or lung problems then this may be done under a spinal anaesthetic. There is Christie information available 'Partial penectomy'.

Removal of the whole penis (total penectomy) (T3, T4 disease) - removing all the penis is usually done when most of the penis, or the part closest to the body, is affected by cancer. This operation is carried out under a general anaesthetic. There is a Christie information sheet available 'Total penectomy'.

Sentinel node biopsy - in T2 and T3, or G2 and G3 cancer of the penis where there may be a risk that cancer cells have spread out of the penis and into the lymph nodes, a procedure called sentinel node biopsy may be carried out*. A radioactive tracer is injected into the body and the first (or sentinel) nodes to pick up the tracer are removed during a surgical operation. The purpose of this procedure is to see if more treatment is required. The results of the biopsy of these nodes will help us decide if any further treatment is needed. If cancer cells are present in these nodes a further operation called a groin node dissection will be recommended.

* There is a Christie information leaflet available 'Sentinel node biopsy for cancer of the penis'.

Groin node dissection - this operation is recommended when there are cancer cells in the lymph nodes in the groin. These may be found after an ultra sound scan and needle aspiration of fluid, or following a sentinel node biopsy or from the appearances on a CT or MRI scan. Groin node dissections can be done on either one or both groins depending on the individual. There is Christie information available 'Groin lymph node dissection: surgery for penile cancer'.

- **Radiotherapy (T1, T2 disease)**

Radiotherapy is occasionally used instead of surgery. High energy X-rays are used to destroy cancer cells whilst care is taken not to damage surrounding healthy tissue. This treatment is given as an outpatient with daily visits to the hospital (not weekends) for up to 4 weeks.

- **Chemotherapy**

Chemotherapy is the use of a combination of anti-cancer drugs which in this case are given into the veins to treat the whole body. This treatment is offered if there is thought to be cancer in other parts of the body as well as the penis. Chemotherapy is sometimes given before surgery or radiotherapy to make these treatments more effective or may be given to slow down the progress of the cancer. There are information sheets available on the individual drugs.

Clinical trials

You may be asked to take part in a clinical trial, as research into new ways of treating cancer of the penis is going on all the time. Any trial would be discussed with you fully to make sure that you understand what is involved before you decide to go ahead. If you decide not to take part in a trial or if you wish to withdraw from a trial at any stage, you would still be offered the best standard care available.

Emotional support

A diagnosis of cancer is likely to cause you to experience a whole range of emotions including fear, anger and resentment as you come to terms with what is happening. Everybody copes in different ways, but talking to others is often helpful. Usually it is best to be open with people, especially those closest to you, so they know what you are thinking and to help them understand how you are feeling. Cancer of the penis obviously causes other concerns affecting a man's body image, worries about sexual relationships and fertility. If you are finding it difficult to cope and would like to speak to someone other than family or friends, it may be helpful to discuss things with your GP, specialist nurse or specialist counsellors who are available at The Christie. Let us know if you think we can be of help.

Follow-up

After any of the treatments mentioned above there will be a period of several years during which we will ask you to come back to clinic for check-up visits. Some of these appointments may be for scans. How frequently you come to the outpatient department will vary according to what treatment you have had.

Contacts

You may have other questions about issues not covered in this information sheet. Please contact one of your key workers, the Macmillan urology clinical nurse specialists:

Jane Booker **0161 446 8018**
Steve Booth **0161 918 2369**
Sharon Capper **0161 446 3856**
Helen Johnson **0161 918 7000**

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 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