



# Cancer of the Penis

# What Is Penile Cancer (Cancer of the Penis)?

Penile cancer is a disease in which malignant (cancer) cells form in the tissues of the penis. The penis is a rod-shaped male reproductive organ that passes sperm and urine from the body. It contains two types of erectile tissue (spongy tissue with blood vessels that fill with blood to make an erection):

- **Corpora cavernosa:** The two columns of erectile tissue that form most of the penis.
- **Corpus spongiosum:** The single column of erectile tissue that forms a small portion of the penis. The corpus spongiosum surrounds the urethra (the tube through which urine and sperm pass from the body).

The erectile tissue is wrapped in connective tissue and covered with skin. The glans (head of the penis) is covered with loose skin called the foreskin.

## What Are the Risk Factors for Penile Cancer?

Anything that increases the chance of getting a disease is called a risk factor. Having a risk factor does not mean that you will get cancer; not having risk factors does not mean that you will not get cancer.

Circumcision may help prevent infection with the human papillomavirus (HPV). A circumcision is an operation in which the doctor removes part or all of the foreskin from the penis. Many boys are circumcised shortly after birth.

Men who were not circumcised at birth may have a higher risk of developing penile cancer. Other risk factors for penile cancer include the following:

- Being age 60 or older
- Having phimosis (a condition in which the foreskin of the penis cannot be pulled back over the glans)
- Having poor personal hygiene
- Having many sexual partners
- Using tobacco products

## What Are the Signs and Symptoms of Penile Cancer?

These and other signs may be caused by penile cancer or by other conditions:

- Redness, irritation, or a sore on the penis
- A lump on the penis

## What Tests Are Used to Detect (Find) and Diagnose Cancer of the Penis?

The following tests and procedures may be used:

- **Physical exam and history**
- **Biopsy:** The removal of cells or tissues so they can be viewed under a microscope by a pathologist to check for signs of cancer

After penile cancer has been diagnosed, tests are done to find out if cancer cells have spread within the penis or to other parts of the body.

The process used to find out if cancer has spread within the penis or to other parts of the body is called staging. The information gathered from the staging process determines the stage of the disease. It is important to know the stage in order to plan treatment.

The following tests and procedures may be used in the staging process:

- **CT scan (CAT scan):** A procedure that makes a series of detailed pictures of areas inside the body, such as the pelvis, taken from different angles.
- **PET scan (positron emission tomography scan):**  
A procedure to find tumor cells in the body. A small amount of radioactive glucose (sugar) is injected into a vein. The PET scanner rotates around the body and makes a picture of where glucose is being used in the body. Malignant tumor cells show up brighter in the picture because they are more active and take up more glucose than normal cells do.
- **MRI (magnetic resonance imaging):** A procedure that uses a magnet, radio waves, and a computer to make a series of detailed pictures of areas inside the body.
- **Ultrasound exam:** A procedure in which high-energy sound waves (ultrasound) are bounced off internal tissues or organs.
- **Chest x-ray:** An x-ray of the organs and bones inside the chest.
- **Lymph node biopsy:** The removal of cells or tissues so they can be viewed under a microscope by a pathologist to check for signs of cancer.

## How Can Penile Cancer Spread?

Cancer can spread through tissue, the lymph system, and the blood:

- **Tissue:** The cancer spreads from where it began by growing into nearby areas.
- **Lymph system:** The cancer spreads from where it began by getting into the lymph system. The cancer travels through the lymph vessels to other parts of the body.
- **Blood:** The cancer spreads from where it began by getting into the blood. The cancer travels through the blood vessels to other parts of the body.

When cancer spreads to another part of the body, it is called metastasis. Cancer cells break away from where they began (the primary tumor) and travel through the lymph system or blood. The metastatic tumor is the same type of cancer as the primary tumor. For example, if penile cancer spreads to the lung, the cancer cells in the lung are actually penile cancer cells. The disease is metastatic penile cancer, not lung cancer.

## Certain Factors Affect Prognosis (Chance of Recovery) and Treatment Options

The prognosis (chance of recovery) and treatment options depend on the following:

- The stage of the cancer
- The location and size of the tumor
- Whether the cancer has just been diagnosed or has recurred (come back)

# The Following Stages Are Used for Penile Cancer

## Stage 0

Stage 0 is found only on the surface of the skin of the penis. Stage 0 cancer is also called carcinoma in situ.

## Stage I (1)

In stage I, cancer has spread to connective tissue just under the skin of the penis.

## Stage II (2)

Stage II Cancer has spread to either:

- Connective tissue just under the skin of the penis and to one lymph node in the groin; or
- Erectile tissue (spongy tissue that gets larger to make an erection) and may have spread to one lymph node in the groin.

## Stage III (3)

Cancer has spread to either:

- Connective tissue or erectile tissue of the penis and to more than one lymph node in the groin; or
- The urethra or prostate, and may have spread to one or more lymph nodes in the groin.

## Stage IV (4)

In stage IV, cancer has spread:

- To tissues next to the penis and may have spread to lymph nodes in the groin or pelvis; or
- Anywhere in or near the penis and in one or more lymph nodes deep in the pelvis or groin; or
- To distant parts of the body.

# How Is Penile Cancer Treated?

Some treatments are standard (the currently used treatment), and some are being tested in clinical trials. Four types of standard treatment are used:

## Surgery

Surgery is the most common treatment for all stages of penile cancer. A doctor may remove the cancer using one of the following operations:

- **Mohs microsurgery:** A procedure in which the tumor is cut from the skin in thin layers. During the surgery, the edges of the tumor and each layer of tumor removed are viewed through a microscope to check for cancer cells. Layers continue to be removed until no more cancer cells are seen. This type of surgery removes as little normal tissue as possible and is often used to remove cancer on the skin. It is also called Mohs surgery.
- **Laser surgery:** A surgical procedure that uses a laser beam (a narrow beam of intense light) as a knife to make bloodless cuts in tissue or to remove a surface lesion such as a tumor.
- **Cryosurgery:** A treatment that uses an instrument to freeze and destroy abnormal tissue. This type of treatment is also called cryotherapy.
- **Circumcision:** Surgery to remove part or all of the foreskin of the penis.
- **Wide local excision:** Surgery to remove only the cancer and some normal tissue around it.
- **Amputation of the penis:** Surgery to remove part or all of the penis. If part of the penis is removed, it is a partial penectomy. If all of the penis is removed, it is a total penectomy.

Lymph nodes in the groin may be taken out during surgery.

## Radiation Therapy

Radiation therapy is a cancer treatment that uses high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing.

## Chemotherapy

Chemotherapy is a cancer treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing.

## Immunotherapy

Biologic therapy is a treatment that uses the immune system to fight cancer.

## Follow-Up Tests May Be Needed

Some of the tests that were done to diagnose the cancer or to find out the stage of the cancer may be repeated. Some tests will be repeated in order to see how well the treatment is working. Decisions about whether to continue, change, or stop treatment may be based on the results of these tests.

Support is available for coping with changes that may have happened because of cancer treatment. Your healthcare team can offer ideas as well as a plan of care for long-term follow-up.



# What Are Clinical trials?

Clinical trials are done to find out if new cancer treatments are safe and effective or better than the standard treatment.

People who take part in a clinical trial may receive:

- The standard treatment alone or
- The standard treatment plus the new treatment being studied

Taking part in a clinical trial helps improve the way cancer will be treated in the future. Even when clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward.

Some clinical trials only include people who have not yet received treatment. Other trials test treatments for those whose cancer has not gotten better. There are also clinical trials that test new ways to stop cancer from coming back or reduce the side effects of cancer treatment.

Many of today's standard treatments for cancer are based on earlier clinical trials.

**Ask if there is a clinical trial right for you.**

## To Learn More About Penile Cancer

### **American Cancer Society**

<https://www.cancer.org/>

### **National Cancer Institute**

<https://www.cancer.gov/>

### **National Comprehensive Cancer Network Guidelines for Patients**

<https://www.nccn.org/patients/guidelines/cancers.aspx>

### **MedlinePlus**

<https://medlineplus.gov/>

## Common Questions

What does the pathology report say?

What is the stage of my cancer?

What are my goals for treatment?

What are my treatment choices?

What kind of support services are available for me about finances, emotions, spiritual questions, etc.?

| My Health Care Team                   | Contact Information |
|---------------------------------------|---------------------|
| Surgeon:                              |                     |
| Radiation Oncologist:                 |                     |
| Medical Oncologist:                   |                     |
| Primary Care Doctor:                  |                     |
| Nurse:                                |                     |
| Navigator:                            |                     |
| Registered Dietitian<br>Nutritionist: |                     |
| Other:                                |                     |
| Other:                                |                     |

Adapted from: Penile Cancer Treatment (PDQ®)  
 This information is not intended as a substitute for professional medical care.  
 Always follow your health care provider's instructions.

