Vulvar Cancer



Vulvar cancer is a type of cancer that occurs on the outer surface area of the female genitalia. The vulva is the area of skin that surrounds the urethra and vagina, including the clitoris and labia.

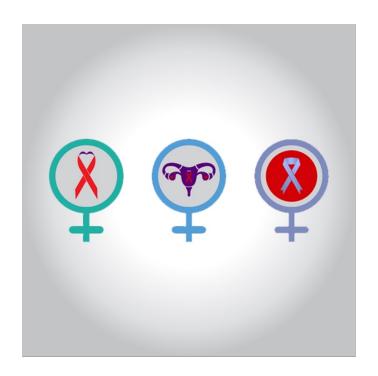
Vulvar cancer commonly forms as a lump or sore on the vulva that often causes itching. Though it can occur at any age, vulvar cancer is most commonly diagnosed in older adults.

Vulvar cancer treatment usually involves surgery to remove the cancer and a small amount of surrounding healthy tissue. Sometimes vulvar cancer surgery requires removing the entire vulva. The earlier vulvar cancer is diagnosed, the less likely an extensive surgery is needed for treatment.

Symptoms

Signs and symptoms of vulvar cancer may include:

- Itching that doesn't go away
- Pain and tenderness
- Bleeding that isn't from menstruation
- Skin changes, such as color changes or thickening
- A lump, wartlike bumps or an open sore (ulcer)



Causes

It's not clear what causes vulvar cancer.

In general, doctors know that cancer begins when a cell develops mutations in its DNA. The mutations allow the cell to grow and divide rapidly. The cell and its offspring go on living when other normal cells would die. The accumulating cells form a tumor that may be cancerous, invading nearby tissue and spreading to other parts of the body.

Risk factors

Although the exact cause of vulvar cancer isn't known, certain factors appear to increase your risk of the disease, including:

- Increasing age. The risk of vulvar cancer increases with age, though it can occur at any age. The average age at diagnosis is 65.
- Being exposed to human papillomavirus (HPV). HPV is a sexually transmitted infection that increases the risk of several cancers, including vulvar cancer and cervical cancer. Many young, sexually active people are exposed to HPV, but for most the infection goes away on its own.
 For some, the infection causes cell changes and increases the risk of cancer in the future.
- Smoking Smoking cigarettes increases the risk of vulvar cancer.
- Having a weakened immune system. People who take medications to suppress the immune system, such as those who've undergone organ transplant, and those with conditions that weaken the immune system, such as human immunodeficiency virus (HIV), have an increased risk of vulvar cancer.
- Having a history of precancerous conditions of the vulva. Vulvar intraepithelial neoplasia is a precancerous condition that increases the risk of vulvar cancer. Most

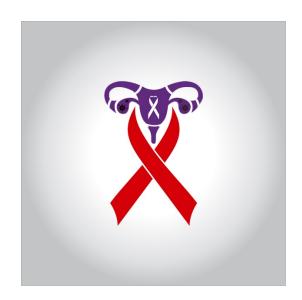
cases of vulvar intraepithelial neoplasia will never develop into cancer, but a small number do go on to become invasive vulvar cancer. For this reason, your doctor may recommend treatment to remove the area of abnormal cells and periodic follow-up checks.

 Having a skin condition involving the vulva. Lichen sclerosus, which causes the vulvar skin to become thin and itchy, increases the risk of vulvar cancer.

Types of vulvar cancer

The type of cell in which vulvar cancer begins helps your doctor plan the most effective treatment. The most common types of vulvar cancer include:

- Vulvar squamous cell carcinoma. This cancer begins in the thin, flat cells that line the surface of the vulva. Most vulvar cancers are squamous cell carcinomas.
- Vulvar melanoma. This cancer begins in the pigmentproducing cells found in the skin of the vulva.



Prevention

Reduce your risk of sexually transmitted infections

To reduce your risk of vulvar cancer, reduce your risk of the sexually transmitted infection HPV:

- Limit your number of sexual partners. The more sexual partners you have, the greater your risk of exposure to HPV.
- Use a condom every time you have sex. Condoms may reduce your risk of contracting HPV but can't fully protect against it.
- Get the HPV vaccine. Children and young adults may consider the HPV vaccine, which protects against the strains of the virus that are thought to cause the most cases of vulvar cancer.

Ask your doctor about pelvic exams

Ask your doctor how often you should undergo pelvic exams. These exams allow your doctor to visually examine your vulva and manually examine your internal reproductive organs to check for abnormalities.

Talk to your doctor about your risk factors for vulvar cancer and other pelvic cancers in order to determine the most appropriate screening exam schedule for you.

Diagnosis

Diagnosing vulvar cancer

Tests and procedures used to diagnose vulvar cancer include:

- Examining your vulva. Your doctor will likely conduct a physical exam of your vulva to look for abnormalities.
- Using a special magnifying device to examine your vulva. During a colposcopy exam, your doctor uses a device that works like a magnifying glass to closely inspect your vulva for abnormal areas.
- Removing a sample of tissue for testing (biopsy). To determine whether an area of suspicious skin on your vulva is cancer, your doctor may recommend removing

a sample of skin for testing. During a biopsy procedure, the area is numbed with a local anesthetic and a scalpel or other special cutting tool is used to remove all or part of the suspicious area. Depending on how much skin is removed, you may need stitches.

Determining the extent of the cancer

Once your diagnosis is confirmed, your doctor works to determine the size and extent (stage) of your cancer. Staging tests can include:

- Examination of your pelvic area for cancer spread. Your doctor may do a more thorough examination of your pelvis for signs that the cancer has spread.
- Imaging tests. Images of your chest or abdomen may show whether the cancer has spread to those areas.
 Imaging tests may include X-ray, computerized tomography (CT), magnetic resonance imaging (MRI) and positron emission tomography (PET).

Vulvar cancer stages

Your vulvar cancer is assigned a Roman numeral that denotes its stage. Stages of vulvar cancer include:

- Stage I describes a small tumor that is confined to the vulva or the area of skin between your vaginal opening and anus (perineum). This cancer hasn't spread to your lymph nodes or other areas of your body.
- Stage II tumors are those that have grown to include nearby structures, such as the lower portions of the urethra, vagina and anus.
- Stage III cancer has spread to lymph nodes.
- Stage IV signifies a cancer that has spread more extensively to the lymph nodes, or that has spread to the upper portions of the urethra or vagina, or that has spread to the bladder, rectum or pelvic bone. Cancer may have spread (metastasized) to distant parts of your body.

Vulvar melanoma uses a different staging system.

Treatment

Treatment options for vulvar cancer depend on the type and stage of your cancer, your overall health and your preferences.

Surgery to remove vulvar cancer

Operations used to treat vulvar cancer include:

- Removing the cancer and a margin of healthy tissue (excision). This procedure, which may also be called a wide local excision or radical excision, involves cutting out the cancer and a small amount of normal tissue that surrounds it. Cutting out what doctors refer to as a margin of normal-looking tissue helps ensure that all of the cancerous cells have been removed.
- More extensive surgery. Surgery to remove part of the vulva (partial vulvectomy) or the entire vulva, including the underlying tissue (radical vulvectomy), may be an option for larger cancers. However, doctors may recommend combining radiation therapy and chemotherapy to try to shrink the tumor before surgery, which may allow for a less extensive operation.

Surgery to remove the entire vulva carries a risk of complications, such as infection and problems with healing around the incision.

Surgery to your vulva may change sensation in your genital area. Depending on the operation, your genital area may feel numb and you may not be able to achieve orgasm during sexual intercourse.

Surgery to remove nearby lymph nodes

Vulvar cancer can spread to the lymph nodes in the groin, so your doctor may remove these lymph nodes at the time you undergo surgery to remove the cancer. Depending on your situation, your doctor may remove only a few lymph nodes or many lymph nodes.

Removing lymph nodes can cause fluid retention and leg swelling, a condition called lymphedema.

In certain situations, surgeons may use a technique that allows them to remove fewer lymph nodes. Called sentinel lymph node biopsy, this procedure involves identifying the lymph node where the cancer is most likely to spread first. The surgeon then removes that lymph node for testing. If cancer cells aren't found in that lymph node, then it's unlikely that cancer cells have spread to other lymph nodes.

Radiation therapy

Radiation therapy uses high-powered energy beams, such as X-rays and protons, to kill cancer cells. Radiation therapy for vulvar cancer is usually administered by a machine that moves around your body and directs radiation to precise points on your skin (external beam radiation).

Radiation therapy is sometimes used to shrink large vulvar cancers in order to make it more likely that surgery will be successful. Radiation is sometimes combined with chemotherapy, which can make cancer cells more vulnerable to radiation therapy.

If cancer cells are discovered in your lymph nodes, your doctor may recommend radiation to the area around your lymph nodes to kill any cancer cells that might remain after surgery. Radiation is sometimes combined with chemotherapy in these situations.

Chemotherapy

Chemotherapy is a drug treatment that uses chemicals to kill cancer cells. Chemotherapy drugs are typically administered through a vein in your arm or by mouth.

For those with advanced vulvar cancer that has spread to other areas of the body, chemotherapy may be an option.

Chemotherapy is sometimes combined with radiation therapy to shrink large vulvar cancers in order to make it more likely that surgery will be successful. Chemotherapy may also be combined with radiation if there's evidence cancer has spread to the lymph nodes.

Follow-up tests after treatment

After completing vulvar cancer treatment, your doctor may recommend periodic follow-up exams to look for a cancer recurrence. Even after successful treatment, vulvar cancer can return. Your doctor will determine the schedule of follow-up exams that's right for you, but doctors generally recommend exams two to four times each year for the first two years after vulvar cancer treatment.