About Vulvar Cancer

Overview and Types

If you have been diagnosed with vulvar cancer or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- What Is Vulvar Cancer?

Research and Statistics

See the latest estimates for new cases of vulvar cancer and deaths in the US and what research is currently being done.

- What Are the Key Statistics About Vulvar Cancer?
- What's New in Vulvar Cancer Research and Treatment?

What Is Vulvar Cancer?

The vulva is the outer part of the female genitals. The vulva includes the opening of the vagina (sometimes called the vestibule), the labia majora (outer lips), the labia minora (inner lips), and the clitoris.
Around the opening of the vagina, there are 2 sets of skin folds. The inner set, called the *labia minora*, are small and hairless. The outer set, the *labia majora*, are larger, with hair on the outer surface. The inner and outer labia (Latin for lips) meet, protecting the vaginal opening and, just above it, the opening of the urethra (the short tube that carries urine from the bladder). The Bartholin glands are found just inside the opening of the vagina -- one on each side. These glands produce a mucus-like fluid that acts as a lubricant during sex.

At the front of the vagina, the labia minora meet to form a fold or small hood of skin called the *prepuce*. The *clitoris* is beneath the prepuce. The clitoris is an approximately ¾-inch structure of highly sensitive tissue that becomes swollen with blood during sexual stimulation. The labia minora also meet at a place just beneath the vaginal opening, at the *fourchette*. Beyond the fourchette is the *anus*, the opening to the rectum. The space between the vagina and the anus is called the *perineum*.

Cancer of the vulva (also known as *vulvar cancer*) most often affects the inner edges of the labia majora or the labia minora. Cancer occurs on the clitoris or in the Bartholin glands less often.
Types of vulvar cancer

Cancer starts when cells in the body begin to grow out of control. Cells in nearly any part of the body can become cancer, and can spread to other areas of the body. To learn more about how cancers start and spread, see What Is Cancer?

Squamous cell carcinomas

Most cancers of the vulva are *squamous cell carcinomas*. This type of cancer begins in squamous cells, the main type of skin cells. There are several subtypes of squamous cell carcinoma:

- The keratinizing type is most common, and usually develops in older women, and is not linked to infection with human papilloma virus (HPV) (HPV is discussed in What Are the Risk Factors for Vulvar Cancer?).
- Basaloid and warty types are less common, and are the kinds more often found in younger women with HPV infections.
- Verrucous carcinoma is an uncommon subtype that is important to recognize because it is slow-growing and tends to have a good prognosis (outlook). This cancer looks like a large wart and a biopsy is needed to determine it is not a benign (non-cancerous) growth.

Adenocarcinoma

Cancer that begins in gland cells is called *adenocarcinoma*. About 8 of every 100 vulvar cancers are adenocarcinomas. Vulvar adenocarcinomas most often start in cells of the Bartholin glands. These glands are found just inside the opening of the vagina. A Bartholin gland cancer is easily mistaken for a cyst (accumulation of fluid in the gland), so a delay in accurate diagnosis is common. Most Bartholin gland cancers are adenocarcinomas. Adenocarcinomas can also form in the sweat glands of the vulvar skin.

Paget disease of the vulva is a condition in which adenocarcinoma cells are found in the top layer of the vulvar skin. Up to 25% of patients with vulvar Paget disease also have an invasive vulvar adenocarcinoma (in a Bartholin gland or sweat gland). In the remaining patients, the cancer cells are found only in the skin's top layer and have not grown into the tissues below.

Melanoma
Melanomas are cancers that develop from the pigment-producing cells that give skin color. They are much more common on sun-exposed areas of the skin, but can start in other areas, such as the vulva. Vulvar melanomas are rare, making up about 6 of every 100 vulvar cancers. More information about melanoma can be found in Melanoma Skin Cancer.

**Sarcoma**

A sarcoma is a cancer that begins in the cells of bones, muscles, or connective tissue. Less than 2 of every 100 vulvar cancers are sarcomas. Unlike other cancers of the vulva, vulvar sarcomas can occur in females at any age, including in childhood.

**Basal cell carcinoma**

Basal cell carcinoma, the most common type of skin cancer, is more often found on sun-exposed areas of the skin. It occurs very rarely on the vulva. For more information on this type of cancer, see Basal and Squamous Cell Skin Cancer.

- References

See all references for Vulvar Cancer

Last Medical Review: July 2, 2014 Last Revised: February 16, 2016

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy.

**What Are the Key Statistics About Vulvar Cancer?**

In the United States, vulvar cancer accounts for about 4% of cancers of the female reproductive organs and 0.6% of all cancers in women. In the United States, women have a 1 in 333 chance of developing vulvar cancer at some point during their life.

The American Cancer Society's estimates for vulvar cancer in the United States for 2017 are:
• About 6,020 cancers of the vulva will be diagnosed
• About 1,150 women will die of this cancer.
Visit the American Cancer Society’s Cancer Statistics Center for more key statistics.

• References
See all references for Vulvar Cancer

Last Medical Review: July 2, 2014 Last Revised: January 6, 2017

What's New in Vulvar Cancer Research and Treatment?

Research is being done to find new ways to prevent and treat cancer of the vulva. There are some promising new developments.

Oncogenes and tumor suppressor genes

Scientists are learning more about how certain genes called oncogenes and tumor suppressor genes control cell growth and how changes in these genes cause normal vulvar cells to become cancerous. This information is already being used to develop new drugs that counteract the effects of these gene changes. The ultimate goal of this research is gene therapy. Gene therapy involves replacing the damaged genes in cancer cells with normal genes in order to stop the abnormal behavior of these cells.

HPV vaccines

Vaccines for preventing and treating vulvar and cervical cancer are being developed and tested.

Some of these vaccines are meant to prevent infection with certain types of HPV by boosting the body’s immunity to them. Two HPV vaccines, Gardasil and Cervarix, are available. Both vaccines are able to prevent infection with HPV types 16 and 18 and
prevent pre-cancerous changes in the cervix. Studies have shown that Gardasil can also prevent anal, vulvar, and vaginal cancers caused by HPV types 6 and 11. Other preventive vaccines are also under study.

Some vaccines being studied are intended to help the immune systems of women with HPV infections destroy the virus and cure the infection before a cancer develops.

Other vaccines are meant to help women who already have a cancer or pre-cancer. These vaccines attempt to produce an immune reaction to the parts of the virus (E6 and E7 proteins) that specifically contribute to the abnormal growth of cancer cells. It is hoped that this immunity will kill the cancer cells or stop them from growing. A vaccine of this type was tested in women with grade 3 vulvar intraepithelial neoplasia (VIN3) that tested positive for HPV-16. Most women treated had their VIN lesions shrink, and in some the lesions even went away completely.

**Drug treatment**

There have been case reports of using drugs known as targeted therapies to treat vulvar cancers. These drugs do not have the same kind of side effects as traditional chemo drugs do. So far, the drugs cetuximab and erlotinib have been tried and doctors have reported some success in a few patients. Sometimes cetuximab is combined with cisplatin chemotherapy for treatment. Further studies of these drugs are needed.

**Combining surgery, radiation therapy, and chemotherapy**

Clinical trials are underway to determine the best way to combine surgery, radiation therapy, and chemotherapy. For example, these trials will provide information about whether certain groups of patients benefit from radiation after surgery and whether patients with cancer that has spread to lymph nodes benefit from chemotherapy or pelvic radiation therapy.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy.

- References
See all references for Vulvar Cancer

Last Medical Review: July 2, 2014 Last Revised: February 16, 2016