



## **VULVAR CANCER**

### **Where is the vulva?**

The vulva is the outer portion of the female genital organs. It consists of the labia majora (two large, fleshy lips), the labia minora (small lips that lie inside the labia majora), the prepuce (a fold of skin over the clitoris), the clitoris, the vestibule (the vaginal opening), and the perineum (the area between the vagina and the anus). You can find out more about this by looking at the patient leaflet on the “Normal Vulva”.

### **What is vulvar cancer?**

Vulvar cancer is an abnormal growth of cells that can occur on any part of the vulva. Cancer of the vulva is not common. It accounts for approximately 4% of cancers affecting the female genital organs, and less than half a percent of all cancers in women. There are several types of vulvar cancer; they are classified according to which cells in the skin become abnormal.

Squamous cell carcinomas are the most common (over 90%). Squamous cells make up the outer layer of the skin. These types of vulvar cancer occur most often on the labia majora, but can be found anywhere on the vulva.

Malignant melanoma is the second most common type of vulvar cancer. Melanoma develops from the color producing skin cells called “melanocytes”, and is most often found on the labia minora or clitoris.

Other types of vulvar cancer include:

- Adenocarcinomas
- Paget's disease
- Sarcomas
- Verrucous carcinoma
- Basal cell carcinoma

## **What should I look for?**

Early diagnosis of vulvar cancer leads to less complicated treatment and the best outcome. Examining your vulva regularly may help you discover abnormal changes early, which will allow early treatment & the best outcome. Women should examine their vulva using a mirror, looking for changes in skin color, texture, or causes of irritation. Any change should be reported to your health care provider.

Common signs and symptoms of vulvar cancer include:

- A cut or sore on the vulva that does not heal
- A lump, a warty growth, or a mass on the vulva
- Skin on the vulva that looks whiter, darker, or of different colors, or feels rougher than the surrounding skin
- Any change in color or size of a mole that was already on the vulva
- Persistent vulvar itching
- Severe vulvar burning
- Painful urination (peeing)
- Bleeding from the vulva

It is important not to use creams or lotions that may cover up the symptoms but then delay the consultation, for example, creams with local anesthetics that numb the feeling in the area, or corticosteroids that can relieve the symptoms. If you have a symptom that bothers you, get professional advice in order to get the right diagnosis and treatment.

## **How is vulvar cancer diagnosed?**

When an abnormal vulvar change is found, a biopsy (removal of a small piece of tissue) is necessary to provide the correct diagnosis and decide on the best treatment. A biopsy is performed after injecting a small amount of local anesthetic around the area to be sampled. A magnifying lens may be used to help to identify the best area to biopsy. More than one biopsy may be necessary for some conditions. The tissue will be sent to a laboratory for examination.

## **Stages of vulvar cancer**

Once vulvar cancer is diagnosed, it is important to check that it involves only the vulva, and has not spread to other parts of the body (this is called staging). Correct staging of the disease is important to determine the correct treatment. Staging may include other testing procedures (chest x-ray, CT scan, MRI, etc.) - before a final treatment plan is made.

## How is vulvar cancer treated?

Treatment of vulvar cancer is closely related to the stage, type and location of the disease. The patient's overall health condition is also important in determining appropriate treatment.

**Surgery** is the most common treatment for vulvar cancer. The size of the lesion and its location on the vulva will decide how much surgery is needed. Often, when the area is small, removal of the cancer cells and a rim of normal tissue (wide radical excision) is sufficient. Larger lesions require removal of more tissue. Lymph nodes in the groin may need to be removed in some situations.

Other treatment options:

**Radiation therapy** uses high energy rays (gamma or x rays) and particles (electrons, protons, neutrons) to kill cancer cells and shrink tumors. Radiation can be given before or after surgery, and is sometimes used to treat the lymph nodes in the groin and pelvis.

**Chemotherapy** uses medicines to kill cancer cells. The medicines may be given orally (by mouth) or through the veins.

## How can vulvar cancer be prevented?

The causes of vulvar cancers are not known. However, certain things may increase the risk of vulvar cancer. One strategy for cancer prevention is to avoid any *controllable* risk factor. A second is to identify and treat any precancerous lesion early. These strategies greatly reduce the chances of developing invasive cancer. Last but not least, HPV related vulvar cancer could be prevented by using the quadrivalent HPV vaccine.

Risk factors include:

- **Age** - women over the age of 70 have an increased risk of developing vulvar cancer.
- **Human papillomavirus (HPV) infection** - HPV types 16 and 18 are thought to be responsible for most of the vulvar cancers in younger women. It can start as a pre-cancerous condition called vulvar intra-epithelial neoplasia (VIN). Condoms do not fully protect against all infection by HPV, as it is spread by any intimate skin-to-skin contact, including areas not covered by the condom. The risk of HPV infection can be lessened by reducing the number of sexual partners, avoiding sex with someone with a history of multiple sexual partners, and avoiding sex at an early age. The majority of precancerous vulvar lesions are related to HPV infections. However, most of these lesions do not progress to vulvar carcinoma.
- **Chronic vulvar inflammation and skin conditions** - long term irritation and inflammation (redness and soreness) of the vulva can increase the risk of vulvar

cancer. Lichen sclerosus and lichen planus are long term skin conditions that can affect the vulva. These conditions may increase the possibility of developing vulvar cancer. If you have one of these skin conditions, you need to be seen at a regular basis by your health care provider. If your provider notices any suspicious changes, a biopsy will be taken to rule out an invasive disease.

- **Cigarette smoking** - Smoking lowers the immune system. This makes women who smoke more likely to develop persistent infections, including HPV.

- **HIV - Immunosuppression** - Infection with human immunodeficiency virus, or any other kind of immunosuppression, decreases the body's ability to fight off an infection, and increases the chance of getting a variety of diseases, including vulvar cancer.

**What is the follow-up care?**

Once the diagnosis of vulvar cancer is made and treatment is complete, patients will need regular follow-up visits with their medical team to assure that they remain cancer free. As with any cancer diagnosis, patients may need continued psychological support throughout their recovery process. A sexual therapist can assist with maintaining a sex life with your partner. A healthy lifestyle can help recovery.