VAGINAL CANCER factsheet

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What are the vulva and the vagina?

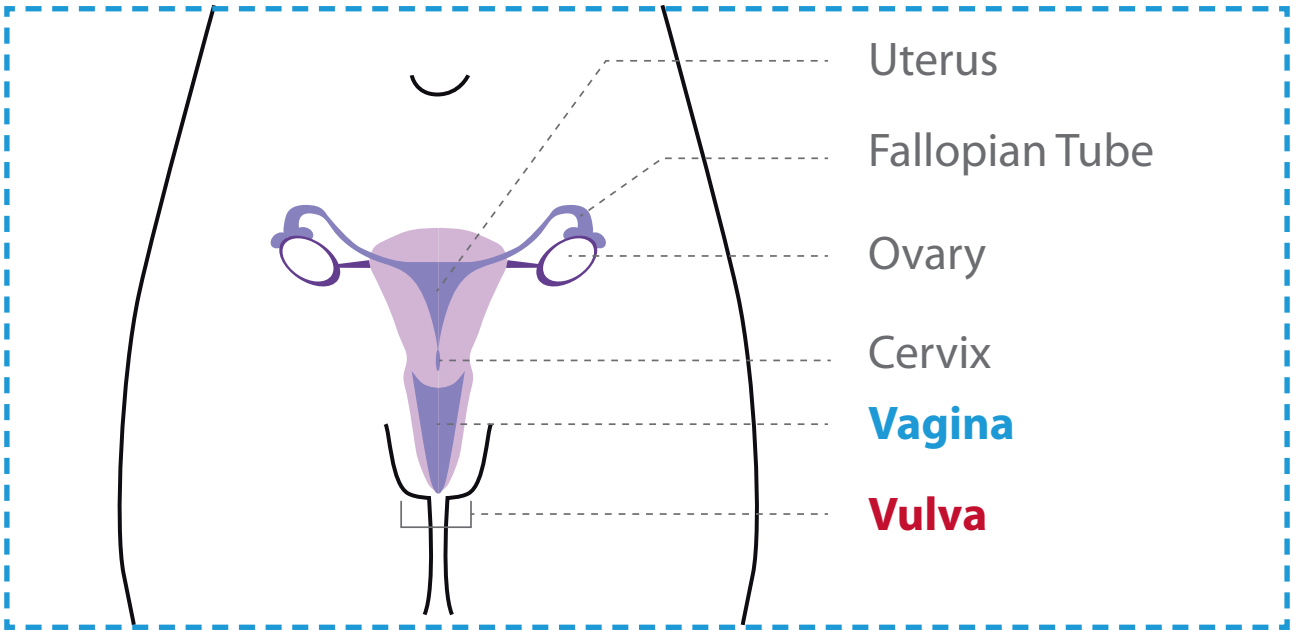
Women's genitalia can be divided into external and internal genital organs.

The **vulva** is the external female genital organ, while the internal female genitalia consist of the **vagina**, the cervix, the uterus, the fallopian tubes and the ovaries.

Although the term "vagina" is often in spoken language used to refer to women's external genitalia, in medical terms the **vagina** is the canal that extends from the vestibule to the cervix and therefore acts as a passage from the uterus to the outside. It is a muscular-elastic organ which can dilate to the extent of allowing childbirth and through which blood flows out during menstruation. The vagina is about 7-10 cm long and coated with mucosa.

The vulva is made up of the labia (outer and inner), the prepuce, the clitoris, and the vestibule.

For more information on the vulva and vulvar cancer, see the Vulvar cancer factsheet.



What is vaginal cancer?

Vaginal cancer is an abnormal growth of cells that can occur in any part of the vagina. **Vaginal cancer is rare (1% to 2% of cancers in the female genital tract)** and represents a very small portion of cancers overall. The average age of patients with vaginal cancer is 74 years.[(1)]

Most tumours occur in the upper third of the vagina, especially the posterior wall.[(2)]

There are several types of vaginal cancer; they are classified according to which cells become abnormal.

- **Squamous cell carcinoma** is the most common type of primary vaginal cancer (cancer that originates

from the vagina itself). This cancer develops from squamous cells, which represent the outer layer of the vaginal epithelium.

- **Adenocarcinomas** represent less than 10% of vaginal cancers and develop from gland cells. Almost all adenocarcinomas are caused by exposure to a medication called Diethylstilbesterol (DES) before birth. DES has been banned since the 1970s, meaning that nearly all cases of primary vaginal adenocarcinoma will disappear in the next decades.
- **Melanomas, lymphomas, and sarcomas** of the vagina are rare, comprising the remaining 5% of vaginal cancers. Vaginal rhabdomyosarcomas are very rare cancers, more common in children and adolescents.
- The remaining vaginal cancers are **metastatic or secondary tumours** that originated elsewhere, such as in the endometrium or in the ovaries and spread to the vagina.

What causes vaginal cancer?

Vaginal cancer is typically more common among older, postmenopausal women, but its incidence is rising in younger women due to an increase in HPV (Human Papilloma Virus) infections.

Indeed, most primary vaginal cancers are caused by HPV infection. HPV is a virus capable of inducing a cancerous transformation of epithelial cells in the vagina. The longer an HPV infection is present, the more likely it is that it will cause cancer. For this reason, **women with a medical history of persistent high-risk HPV infection are at greater risk of developing vaginal cancer**. Additional factors, such as a previous history of precancer of the genital and anal area, a weakened immune system and cigarette smoking, may favour the progression from precancerous lesions to invasive cancer.[(2)]

What are the symptoms of vaginal cancer?

The vagina is difficult to self-examine and vaginal cancer often does not have any symptoms. For this reason, it is important to follow screening programs for cervical cancer, during which the vagina should also be examined. **HPV test can easily identify the risk of vaginal precancerous and cancerous lesions:** in fact, since its introduction, there has been an increase of the diagnosis of vaginal pathology. Sometimes vaginal cancer can be associated with bleeding. For this reason, bleeding from the vagina, especially in post-menopausal women, should always be investigated.

Most common symptoms of vaginal cancer include:

- Unusual vaginal bleeding, for example, after intercourse or after menopause
- Smelly or bloody vaginal discharge
- A lump or itch in your vagina that won't go away
- Painful urination
- Pelvic pain

How is vaginal cancer diagnosed?

Vaginal cancer is usually diagnosed during a colposcopy. Colposcopy is done using a colposcope, an instrument which provides a magnified and illuminated view allowing to distinguish normal from abnormal appearing tissue. A colposcopy may be performed because of an abnormal Pap test or a positive HPV test because of symptoms such as vaginal bleeding. During a colposcopy, if there are any abnormal areas then the doctor will apply local anaesthetic and remove a small part of the area (**a biopsy**). The sample will then be sent to a laboratory for examination (**histology**).

Stages of vaginal cancer

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

How is vaginal cancer treated?

Treatment of vaginal cancer is directly related to the stage, type, and location of the disease.

The patient's general state of health is also important in determining the appropriate treatment.

- **Radiation therapy** uses high energy rays (gamma rays) and particles (electrons, protons, neutrons) to kill cancer cells and shrink the tumour or kill the residual tumoral cells. Radiation is the most

common treatment for this disease. Usually a combination of external radiation (EBRT) and internal radiation (brachytherapy or ICRT) is used.

- **Chemotherapy** uses medication to kill cancer cells. The medication may be given orally (by mouth) or intravenously (directly in the veins) and is often combined with radiotherapy for vaginal cancer.
- **The role of surgery is limited** due to the proximity of the vagina to the bladder, urethra, and rectum. In general, primary treatment with surgery is limited to small lesions. Few cases of advanced lesions, but still limited to the vagina, can be treated with radical surgery involving the removal of the entire vaginal canal. [3,4]

How can vaginal cancer be prevented?

Risk factors for vaginal cancer include:

- **Age:** women over the age of 60 have an increased risk of developing vaginal cancer.
- **Human papillomavirus (HPV) infection:** HPV type 16 is thought to be responsible for a considerable part of the vaginal cancers in younger women. It can start as a **preinvasive condition called high grade squamous vaginal intraepithelial lesion**. 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. Most precancerous vaginal lesions are related to HPV infections. However, most of these lesions do not progress to vaginal carcinoma, if treated.
- **Cigarette smoking:** smoking weakens the immune system. This makes women who smoke more likely to develop persistent infections, including HPV.
- **HIV/Immunosuppression:** an HIV (human immunodeficiency virus) infection, 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 related to persistent viral infections, increasing the risk of vaginal cancer.
- **Vaginal microbiome:** the vagina is an "open" structure that allows easy colonization by microbes. Invading pathogenic microbes can disrupt the ecological balance of the vagina and cause inflammation, which can lead to the risk of cancer.[5]

A second strategy of vaginal cancer prevention is **to identify and treat any preinvasive lesions early**, reducing the chances of developing invasive cancer.[6]

Primary prevention of HPV related vaginal cancer is represented by the HPV vaccine administration before the onset of HPV infection.[7]

What is the follow-up care?

Once a diagnosis of vaginal cancer has been made and treatment is complete, patients will need regular follow-up visits with their healthcare provider performing PAP test and HPV test to assure to assure that they remain cancer free.

- **Emotional and Psychological Support:** As with any cancer diagnosis, patients may need continued psychological support throughout their recovery process. What is inherent to vaginal cancer is that this affects one of the most private, intimate parts of a woman's body. Some women may experience the feeling of shame. **Onco-sexologists and onco-psychologists** are trained to tackle these issues and women should address them if they feel the need.
- **Sexual Health:** A sexual therapist can assist with maintaining a sex life with your partner. Sexuality in a relationship is a complex task where physical and emotional wellbeing may play a crucial role. For tips on sexuality and intimacy following gynecological cancer treatment please **consult the ENGAGe brochure** of the same name. [8] In an ENGAGe brochure entitled "Loss of libido after cancer" [9] there are many tips on intimacy and sexual closeness with your partner without penetration that can be useful to explore.

Conclusion

The aim of this brochure was to provide facts, references and relief to women suffering from vaginal cancer and their entourage.

Early detection is crucial to survival and it is only possible if women share any doubts with the gynaecologists early on.

Once diagnosed, support from families and friends is very important and knowing the right facts is key to destigmatising all gynaecological cancers.

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(9) https://engage.esgo.org/brochures/loss-libido-cancer/

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ENGAGe recommends contacting your local patient association!

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