



HPV

What is HPV?

- ▷ HPV, or human papillomavirus, is the most common sexually transmitted infection in the US.
- ▷ There are many different types of HPV and certain types can lead to 6 different cancers.
- ▷ Nearly all men and women will get at least one type of HPV at some point in their lives, but not all will turn into cancer.¹

How is HPV Spread?

Through intimate skin-to-skin contact by having vaginal, anal, or oral sex with someone who has the virus. At any age, having a new sex partner is a risk factor for getting a new HPV infection.¹

HPV Cancers:

Most HPV Infections will go away by themselves, but others may last longer and cause certain types of cancers of the:

- ▷ Cervix, vagina, and vulva in women
- ▷ Penis in men
- ▷ Anus, back of the throat, the base of the tongue and tonsils in both women and men¹

How do I know if I have HPV?

- ▷ Most people have no signs or symptoms.
- ▷ Many types are not detected until they develop into cancer.
- ▷ The only HPV cancer with a recommended screening test is a pap smear for cervical cancer.
- ▷ Women may find out they have HPV when they get an abnormal pap smear result.
- ▷ Some people find out they have HPV when they develop genital warts, which is a different type of HPV that is less likely to develop into cancer, but is still possible. Genital warts may become uncomfortable and even painful.¹

HPV may lie dormant for many years. Someone may develop genital warts, have an abnormal pap smear or develop cancer, months to years after having a sexual encounter. Therefore, timing to determining when someone acquired an HPV infection, cannot be definitively determined.¹



HPV Prevention:

- ▷ Obtain routine health exams and routine pap smears
- ▷ Using condoms can lower the risk for HPV infection, but HPV may infect areas not covered by a condom
- ▷ Safe sexual practices to decrease exposure, because each new sexual encounter increases the risk of an HPV infection.¹

HPV vaccination is cancer prevention:

- ▷ HPV vaccination can prevent over 90% of HPV cancers and works by preventing the infections that cause these cancers. This does not treat any existing infections or diseases.
- ▷ The HPV vaccine and cervical cancer screening have made cervical cancer one of the most preventable cancers.¹

The CDC recommends all boys and girls get the HPV vaccine:

- ▷ CDC recommends HPV vaccination at ages 11-12, but may be given as early as age 9 and provides the most benefit when given before a person is sexually active and before exposure to HPV.¹
- ▷ This vaccine is available for all boys and girls aged 9-26 and is approved by the FDA & CDC for adults aged 27-45.²
 - ▷ The HPV vaccine is not recommended for everyone older than 27 because it is most effective when given at a young age, before exposure to HPV.³
 - ▷ However, older individuals at risk for acquiring a new HPV infection in the future with new partners, might benefit from vaccination.⁴

Reference:

1. HPV, the Vaccine for HPV, and Cancers Caused by HPV. (20)9, May 24). Retrieved from <https://www.cdc.gov/hpv/index.html>
2. Commissioner, O. (2018, October 08). FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old. Retrieved from <https://www.fda.gov/news-events/press-announcements/fda-approves-expanded-use-gardasil-9-include-individuals-27-through-45-years-old>
3. HPV Vaccine Recommendations. (2020, March 17). Retrieved from <https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html>
4. Shared Clinical Decision-Making Recommendations. (2020, February 10). Retrieved from <https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html>

Prevention of VAGINAL SCARRING

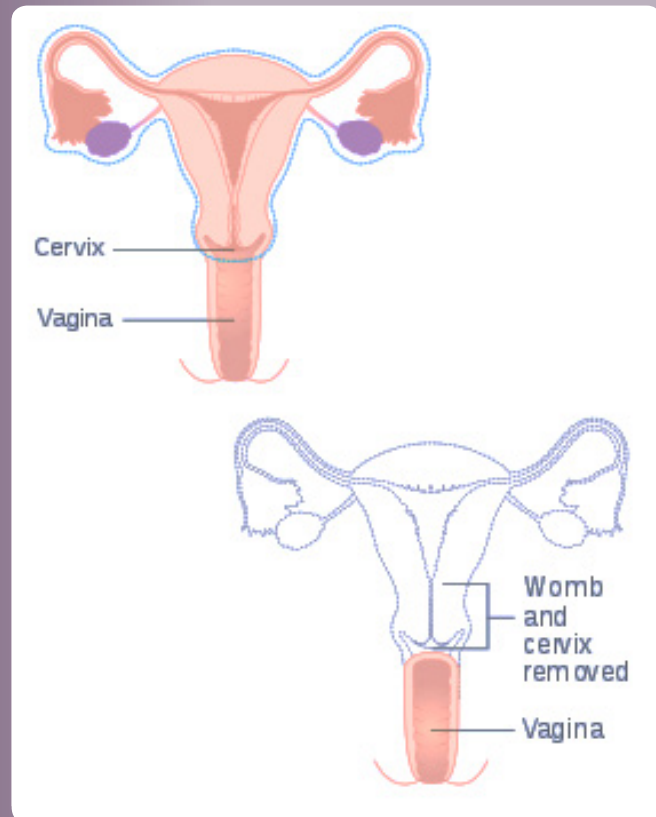
Endometrial (uterine), cervical and vaginal cancers may include vaginal brachytherapy as part of the treatment plan.¹

Vaginal brachytherapy involves inserting a device, containing radioactive material into the vagina with the goal of destroying any remaining cancer cells.¹

Radiation can cause the normal tissue of the vagina to become irritated and sore. As it heals, scar tissue can form in the vagina. The scar tissue can make the vagina shorter or more narrow. If the scar tissue becomes severe, the top of the vagina may become completely closed off.²

Additionally, after having a hysterectomy, as the vaginal cuff heals, scar tissue can develop over time.

If the top of the vagina becomes severely scarred and closed off, your physician will be unable to perform a proper exam.



The purpose of these follow-up exams is to perform assessments and detect early re-occurrences of cancer. The scarring will make your physician unable to visualize or sample cells from the top of the vagina. This scar tissue can then hide cancerous cells underneath, which will progress over time.³



This scarring may also cause sexual intercourse and pelvic exams to become painful.²

We want to prevent these complications and reduce scar tissue development by educating our patients on the importance of dilator use.

A dilator is a plastic or rubber tube used to stretch out the vagina. The dilator must reach the top of the vagina to work appropriately. The recommendation is to use the dilator 3-4x a week, leaving in place for 5-10 minutes. Even if a woman is not interested in staying sexually active, keeping her vagina open will allow for comfortable and proper gynecologic exams as well as the option for comfortable sexual activity in the future.²

Another option is sexual activity 3-4x a week, which may be uncomfortable or not attainable, therefore dilator use is something that can be done independently and self-controlled.⁴

Reference:

1. *Brachytherapy*. (2020, June 19). Retrieved from <https://www.mayoclinic.org/tests-procedures/brachytherapy/about/pac-20385159>
2. *Radiation Therapy for Vaginal Cancer*. (2018, March 19). Retrieved from <https://www.cancer.org/cancer/vaginal-cancer/treating/radiation-therapy.html>
3. Miles, T., & Johnson, N. (2010). *Vaginal dilator therapy for women receiving pelvic radiotherapy*. *The Cochrane database of systematic reviews*, (9), CD007291. <https://doi.org/10.1002/14651858.CD007291.pub2>
4. *Vaginal Dilators for Radiation Therapy*. (2018, September 12). Retrieved from <https://www.oncolink.org/support/sexuality-fertility/sexuality/vaginal-dilators-for-radiation-therapy>

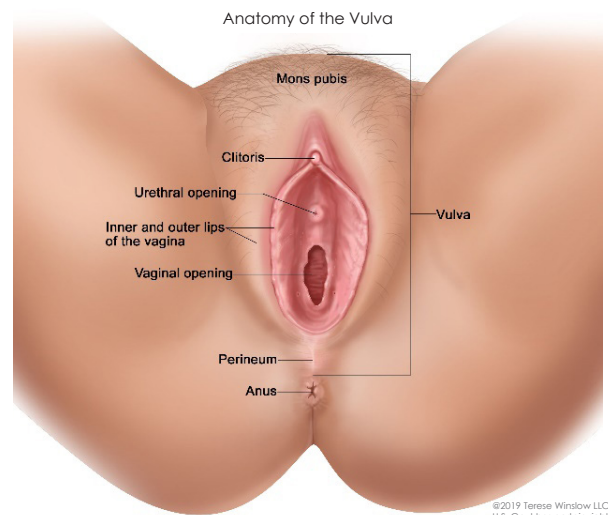
Vulvar Cancer

The vulva is a woman's external genitalia and includes:

- ▷ Inner and outer lips of the vagina
- ▷ Clitoris (sensitive tissue between the lips)
- ▷ Opening of the vagina and its glands
- ▷ Mons pubis (the rounded area in front of the pubic bones that becomes covered with hair at puberty)
- ▷ Perineum (the area between the vulva and the anus)¹

Risk factors:

- ▷ Older age
- ▷ Having HPV
- ▷ History of genital warts
- ▷ High number of sexual partners
- ▷ First sexual encounter at a young age
- ▷ History of abnormal pap smears
- ▷ History of other cancers (melanoma, cervical)
- ▷ Lichen sclerosus
- ▷ HIV
- ▷ Smoking¹



Vulvar cancer is a rare disease in which malignant (cancer) cells form in the tissues of the vulva. Vulvar cancer often does not cause early signs or symptoms. The most common complaints may also be caused by other conditions and it is important to check with a doctor if you have any of the following:¹

- ▷ Vulvar tissue that is thickened, lighter or darker than surrounding tissue.²
- ▷ Itching in the vulvar area that does not go away.
- ▷ A lump or growth on the vulva that looks like a wart or ulcer.
- ▷ Bleeding not related to menstruation (periods).
- ▷ Pain in the vulvar area.¹



Testing used to diagnose vulvar cancer include:

- ▷ Health history of any reported symptoms.
- ▷ Physical exam to examine the vulva for abnormalities.
- ▷ Biopsy of abnormal vulvar tissue, sent to pathology for diagnosis.
- ▷ Imaging tests take pictures inside the body to see if there is a tumor. They can also show if and how far the cancer has spread. This may include an ultrasound, CT scan, PET scan or MRI.¹

Treatment for vulvar cancer will be individualized and based on physical exam, pathology results and imaging.

Treatment may include:

- ▷ Surgical resection to remove the abnormal tissue without any loss of the woman's sexual function, but is based on location. May require more than one surgery, depending on margin status and depth of invasion.³
- ▷ Radiation therapy uses high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing.¹
- ▷ Chemotherapy uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping the cells from dividing.¹

Ways you can reduce your risk of developing vulvar cancer:

- ▷ Obtain routine health screenings including well women exams and pap smears.
- ▷ Don't smoke or stop smoking.
- ▷ Practice safe sexual practices by limiting partners and using condoms.⁴
- ▷ Get the HPV vaccine – This vaccine is available for all boys and girls aged 9-26 and is approved by the FDA & CDC for adults aged 27-45.⁵
 - ▷ The HPV vaccine is not recommended for everyone older than 27 and is most effective when given at a young age, before exposure to HPV.⁶
 - ▷ However, older individuals at risk for acquiring a new HPV infection in the future with new partners, might benefit from vaccination.⁷

References:

1. PDQ® Adult Treatment Editorial Board. PDQ Vulvar Cancer Treatment. Bethesda, MD: National Cancer Institute. Updated <04/17/2020>. Available at: <https://www.cancer.gov/types/vulvar/patient/vulvar-treatment-pdq>. [PMID: 26389324]
2. Signs and Symptoms of Vulvar Cancers and Pre-Cancers. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/detection-diagnosis-staging/signs-symptoms.html>



3. *Surgery for Vulvar Cancer. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/treating/surgery.html>*
4. *Can Vulvar Cancer Be Prevented? (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/causes-risks-prevention/prevention.html>*
5. *Commissioner, O. (2018, October 08). FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old. Retrieved from <https://www.fda.gov/news-events/press-announcements/fda-approves-expanded-use-gardasil-9-include-individuals-27-through-45-years-old>*
6. *HPV Vaccine Recommendations. (2020, March 17). Retrieved from <https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html>*
7. *Shared Clinical Decision-Making Recommendations. (2020, February 10). Retrieved from <https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html>*

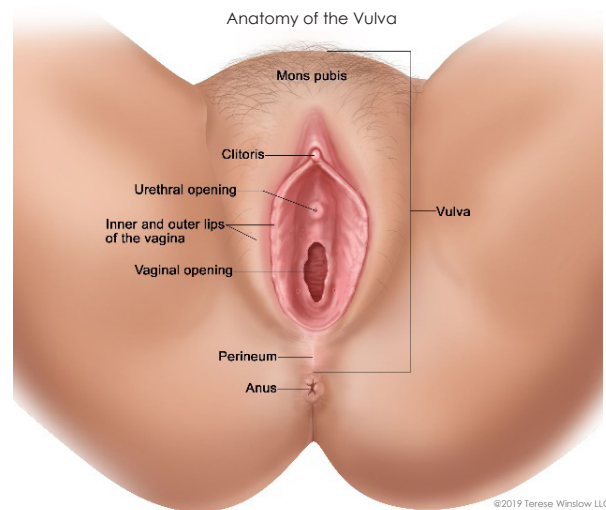
Vulvar Dysplasia

The vulva is a woman's external genitalia and includes:

- ▷ Inner and outer lips of the vagina
- ▷ Clitoris (sensitive tissue between the lips)
- ▷ Opening of the vagina and its glands
- ▷ Mons pubis (the rounded area in front of the pubic bones that becomes covered with hair at puberty)
- ▷ Perineum (the area between the vulva and the anus)¹

Risk factors:

- ▷ Older age
- ▷ Having HPV
- ▷ History of genital warts
- ▷ High number of sexual partners
- ▷ First sexual encounter at a young age
- ▷ History of abnormal pap smears
- ▷ History of other cancers (melanoma, cervical)
- ▷ Lichen sclerosis
- ▷ HIV
- ▷ Smoking¹



© 2019 Terese Winslow LLC
U.S. Gov't has certain rights

Vulvar dysplasia, also referred to as vulvar intraepithelial neoplasia (VIN), describes abnormal cells found on the surface layer of the vulvar tissue.²

- ▷ VIN is not cancer, but is a precancerous change that can develop into cancer. Vulvar dysplasia ranges from mild to moderate to severe and is synonymous with VIN 1, VIN 2 and VIN 3 with the number 3 indicating the furthest progression towards cancer.²



Vulvar dysplasia often does not cause early signs or symptoms and the most common complaints may also be caused by other conditions.¹

Therefore, it is important to check with a doctor if you have any of the following:

- ▷ Vulvar tissue that is thickened, lighter or darker than surrounding tissue.³
- ▷ Itching in the vulvar area that does not go away.
- ▷ A lump or growth on the vulva that looks like a wart or ulcer.
- ▷ Bleeding not related to menstruation (periods).
- ▷ Pain in the vulvar area.¹

Testing used to diagnose vulvar dysplasia include:

- ▷ Health history of any reported symptoms.
- ▷ Physical exam to examine the vulva for abnormalities.
- ▷ Biopsy of abnormal vulvar tissue, sent to pathology for diagnosis.¹

Treatment for vulvar dysplasia is aimed at preventing the development into vulvar cancer and will be individualized and determined by your physician.

Treatment options include:

- ▷ Topical therapy with Aldara (Imiquimod) works by boosting the body's immune response to the area of abnormal tissue.⁴
- ▷ Topical steroids may be used in lichen sclerosus to thin the tissue, prevent progression and relieve symptoms.⁵
- ▷ CO2 laser uses high intensity energy from a light beam to destroy abnormal areas⁶
- ▷ Surgical resection to remove the abnormal tissue without any loss of the woman's sexual function, but is based on location. May require more than one surgery, depending on margin status and depth of invasion.⁷

Ways you can reduce your risk of developing vulvar dysplasia:

- ▷ Obtain routine health screenings including well women exams and pap smears.
- ▷ Don't smoke or stop smoking.
- ▷ Practice safe sexual practices by limiting partners and using condoms.⁸
- ▷ Get the HPV vaccine – This vaccine is available for all boys and girls aged 9-26 and is approved by the FDA & CDC for adults aged 27-45.⁹
 - ▷ The HPV vaccine is not recommended for everyone older than 27 and is most effective when given at a young age, before exposure to HPV.¹⁰
 - ▷ However, older individuals at risk for acquiring a new HPV infection in the future with new partners, might benefit from vaccination.¹¹



References:

1. PDQ® Adult Treatment Editorial Board. *PDQ Vulvar Cancer Treatment*. Bethesda, MD: National Cancer Institute. Updated <04/17/2020>. Available at: <https://www.cancer.gov/types/vulvar/patient/vulvar-treatment-pdq>. [PMID: 26389324]
2. *Risk Factors for Vulvar Cancer*. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/causes-risks-prevention/risk-factors.html>
3. *Signs and Symptoms of Vulvar Cancers and Pre-Cancers*. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/detection-diagnosis-staging/signs-symptoms.html>
4. *Topical Therapy for Vulvar Pre-Cancer*. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/treating/topical-therapy.html>
5. Cooper, S. M., & Arnold, S. J. (2019, February 12). *Patient education: Lichen sclerosus (Beyond the Basics)*. Retrieved from <https://www.uptodate.com/contents/lichen-sclerosus-beyond-the-basics>
6. *How Lasers Are Used to Treat Cancer*. (2020, May). Retrieved from <https://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/lasers-in-cancer-treatment.html>
7. *Surgery for Vulvar Cancer*. (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/treating/surgery.html>
8. *Can Vulvar Cancer Be Prevented?* (2018, January). Retrieved from <https://www.cancer.org/cancer/vulvar-cancer/causes-risks-prevention/prevention.html>
9. Commissioner, O. (2018, October 08). *FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old*. Retrieved from <https://www.fda.gov/news-events/press-announcements/fda-approves-expanded-use-gardasil-9-include-individuals-27-through-45-years-old>
10. *HPV Vaccine Recommendations*. (2020, March 17). Retrieved from <https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html>
11. *Shared Clinical Decision-Making Recommendations*. (2020, February 10). Retrieved from <https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html>