

Human Papilloma Virus (HPV)

by Leonardo Rodriguez, MD

Genital human papilloma virus (HPV) is the most common sexually transmitted infection. It is estimated that at least three out of four people who are sexually active will get an HPV infection during their lifetime. There are more than 100 HPV types. About 30 different types are spread through sexual contact. HPV can infect the genital areas of males and females, causing genital warts. It can also cause abnormal PAP Smears and cervical cancer in women. Most of those infected with HPV have no symptoms, which contributes to the spread of these viruses.

The HPV virus is transmitted through genital contact, most commonly during vaginal and anal sex. It can also be passed on during oral sex and genital skin to skin contact. Since most of those infected with the virus are asymptomatic, a person can have it even after years have passed since the last sexual contact.

Genital Warts (condylomas)

HPV types 6 and 11 cause most of the cases of genital warts/condylomas. Warts are small bumps or groups of bumps in the genital area. They can be raised, flat, or shaped like a cauliflower. They appear within weeks or months of sexual contact with an infected partner.

Condylomas sometimes go away without treatment. In other cases they need to be treated with medications or surgical removal. The optimal treatment depends on the size and the location of the warts.

HPV and Cervical Cancer

Approximately 15 types of HPV are linked to cancer of the anus, cervix, vulva, vagina, and penis. Of these, cervical cancer is the most common. The cervix is the opening of the uterus at the top of the vagina. When the cells of the cervix are infected by HPV they may become abnormal and start growing differently than the normal cells. These abnormal cells can be detected by a Pap test, even when the woman has no symptoms. Fortunately, in most cases the immune system destroys the virus and the cells return to normal. For those women in which the virus cannot be eliminated by the immune system, the abnormality of the cells of the cervix can become more severe and over the course of several years they could develop cervical cancer.

Since the Pap test can detect the early abnormalities caused by HPV infection, it is possible to prevent cervical cancer. More frequent testing on women with known

infection with high risk HPV viruses can help detect those cases in which the severity of the abnormal cells increases. This will guide treatment and prompt intervention before cancer develops.

Prevention of HPV Infection

There are currently two different vaccines available to prevent infection with the most common types of HPV. Gardasil protect against types 6, 11, 16, 18. Types 6 and 11 cause genital warts and types 16, 18 cause cervical cancer. Cervarix protects against types 16 and 18. These vaccines are recommended for women under the age of 26. They are most effective if given before a woman is sexually active but can also be given to sexually active women and even those with previous HPV infection since the vaccine can protect against other types of the virus.

Other steps to prevent HPV infection include:

- Limiting the number of sexual partners.
- Using condoms to reduce the possibility of skin to skin contact. This will decrease the possibility of infection but it does not completely eliminate it since not all skin surfaces can be covered.

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