Information about human papillomavirus infection

What is the papillomavirus?

Human papillomavirus (HPV) is the most common sexually transmitted viral infection. According to studies, at minimum 80 per cent of Finnish women contracts an HPV infection during the course of their life. HPV infection can go away on its own, remain latent, or cause precancerous changes. In most cases, the body clears out the infection in approximately **two years.**

Human papillomaviruses are classified into high-risk and low-risk categories based on their connection to the development of cervical cancer. **Only a small number** of cellular changes caused by the papillomavirus infection in the cervix, vagina, and outer genitalia develop into precancerous changes, and further into cancer. We know that high-risk HVP types 16 and 18 cause approximately 70 per cent of cervical cancers. Low risk virus types 6 and 11 cause 90 per cent of external condylomas (genital warts).

What papillomavirus causes?

Cervical and vaginal papillomavirus infection is **usually asymptomatic and the changes are only detectable through a Pap test**, where a positive find is reported as an abnormal result.

External condylomas appear as light, red, or skin-colored wart or pimple-like growths. In women, the growths may appear in the cervix, the vagina, the labia, around the urethral orifice, and around the anus. In men, growths may appear under the foreskin, along the penis, around the urethral orifice, and around the anus. In both genders, growths may also appear in the skin around the groin.

Medical appointments and regular Pap tests are needed if cellular changes caused by the papillomavirus infection have been detected, because a precancerous change can be treated before it develops into cancer.

How papillomavirus spreads?

In most cases, a papillomavirus infection is sexually transmitted by direct contact between mucous membranes. Transmission through, for example, hand-to-hand contact, is rare. Having another similar mucosal infection or tearing increases the risk of infection. The virus does not spread through hugs, swimming pools, toilet seats, or by using shared towels.

The **incubation period** of the papillomavirus varies from months to years. It is impossible to determine the exact time of transmission. **If you are in a committed relationship, using**

condoms is not required, because condom use has not been proven to shorten the time of recovery. The more sexual partners, the higher the risk of contracting papillomavirus.

However, in casual encounters, a condom must be used to prevent the transmission of viruses and sexually transmitted diseases. Using a condom does not provide a 100 per cent protection against papillomavirus transmission.

How papillomavirus is diagnosed?

After an abnormal Pap test result, a Colposcopy **follow-up examination** is carried out. During the procedure, small, pinhead-sized biopsies are taken to diagnose possible precancerous changes.

In some circumstances, a high-risk HPV sample, which tests for high-risk virus types, can be taken. If no high-risk virus types are found, it is unlikely that cellular changes that require treatment are going to develop in the coming years.

External condylomas can be observed with the naked eye, or discovered during a colposcopy. A biopsy is taken during the examination, and this will provide more information about the change.

How is the papillomavirus monitored and treated?

Papillomavirus infection will clear up on its own, and usually it does not require treatment. If necessary, warts can be treated with creams, cryotherapy, laser therapy, and by applying liquid treatment on them.

When a papillomavirus infection has been diagnosed, the monitoring and treatment are determined by the biopsy results. **Low-grade precancerous conditions** usually clear up on their own, but their progression must be monitored until the Pap test is once again normal. It is not possible to remove the virus itself, because it is present in large quantities in the cells of the genital area.

Mild and high-level precancerous conditions are treated. Precancerous cervical cells are removed by performing a LEEP, also known as a loop electrosurgical excision procedure, which is carried out under local anesthesia. Precancerous vaginal cells are removed using laser treatment, and precancerous external genital cells are removed using either laser treatment, medical cream, or by removing the affected area.

Papillomavirus vaccine

The HPV vaccine can be used to prevent diseases caused by certain most common papillomavirus types. The best protective effect is achieved if it is administered before becoming sexually active.

More information

You can learn more about gynecological health and the cervical cell sample (Pap test) changes at www.terveyskyla.fi /naistalo (only in Finnish and Swedish).