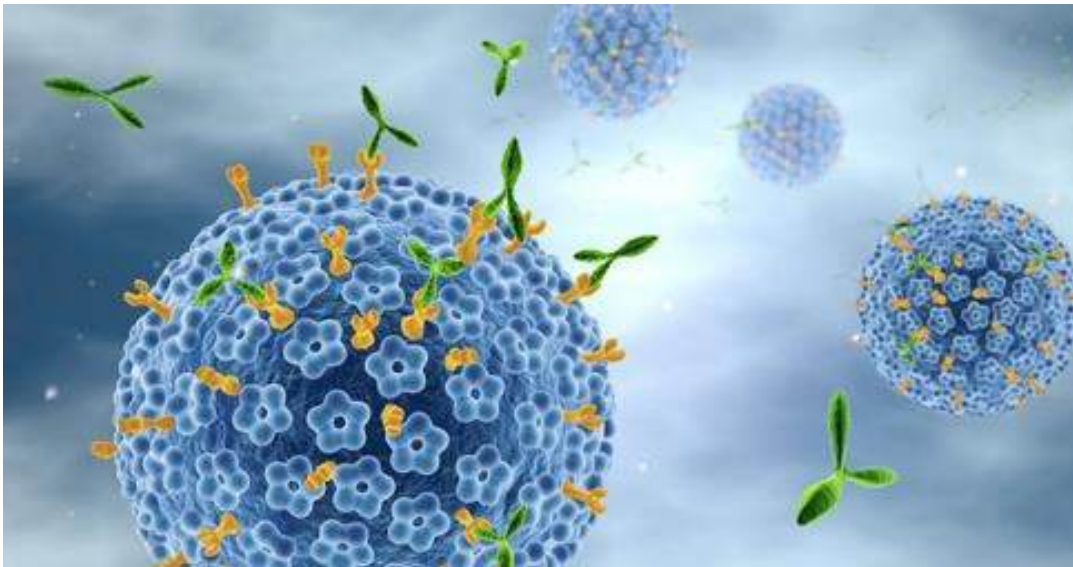


Many microbial agents, including viruses, bacteria and fungi, can be transmitted in different ways and cause infection in the vagina and other areas of the genital tract. Meanwhile, a group of viruses are very common around the world and can infect anyone.

HPV stands for "human papillomavirus" and is the most common sexually transmitted infection.



HPV infection is a type of viral infection that usually causes growths on mucous membranes or skin (warts). It is good to know that there are more than 100 different types of human papilloma virus (HPV). Some types of HPV infections cause warts, but some types may cause genital warts or some of them may cause different types of cancer.

HPV types are divided into high risk and low risk categories. The high-risk type can cause cancerous or pre-cancerous lesions in the following years. Each human papilloma virus has its own number or type, and types

16 and 18 of this virus are more important and dangerous than the others. These two strains are responsible for about 70% of cervical cancers. Other high-risk strains of human papilloma include viruses 31, 33, 45, 52, and 58 and several other viruses.

Low-risk HPV strains such as 6 and 11 are the cause of 90% of genital warts, and their transformation into cancer is very rare. These appendages look like bumps and sometimes look like cauliflower. These warts may appear weeks or months or even years after you are infected with the virus.

What are the ways of transmission of HPV?

HPV virus is a living virus and needs living tissue to survive. Studies have shown

- Sexual intercourse (you get HPV through vaginal, anal, or oral sex with someone who has the virus. The virus is primarily transmitted through vaginal or anal sex, although it can also be transmitted through close skin-to-skin contact during sex. A person carrying HPV can still transmit this disease to another person even if he is asymptomatic)
- Objects and devices: HPV virus may be found on inanimate objects such as clothes or environmental surfaces. It is said that this virus can live on objects for up to 4 hours, on toilet bowls for up to 4 minutes, on clothes and nails for up to 4 days, and in swimming pools. It can survive up to 4 days. So, when using these places, since we don't know if they are contaminated or not, we should take good care of hygiene. . (HPV infection occurs when the virus enters the body through a small cut, scrape, or tear in the skin. The virus is most commonly transmitted through skin-to-skin contact.)



- Through toilets, swimming pools: it has not yet been fully proven, but it is better to follow the health tips.

Does the fetus take from the mother? If the virus is widely present in the birth canal and genital areas, it is said that one out of every 1000 babies will be infected.

If you are pregnant and have HPV infection and genital warts, your baby may also be infected with this virus. In rare cases, the virus may cause a non-cancerous growth in the baby's larynx. Therefore, it is better to discuss the issue with your doctor if you see signs of contamination.

Research conducted on mothers with HPV type 6 and 11, since the mother's immune system was stimulated, a low amount of antibody was seen in the newborn.

In mothers who have been vaccinated, a higher percentage of antibodies against the HPV virus has been seen in the baby's body.

But before addressing the issue of genital warts and HPV infection, it is necessary to explain its difference with genital herpes. Herpes is different from warts both in appearance and origin. The origin of herpes is the HSV virus or herpes simplex, but the origin of warts is HPV.

The most common symptoms of HPV:

- It is asymptomatic and is determined randomly by pap smear and HPV test.
- The person has treatment-resistant and recurrent infections.
- Nasal spotting or vaginal bleeding after sexual intercourse.

In most cases, your immune system fights the HPV virus before the warts appear. Therefore, infection with these viruses does not always lead to warts, but if warts do appear, they have different forms depending on the type of HPV:

- Genital warts: These warts appear in the form of flat lesions and cauliflower-like protrusions or small bumps. Genital warts rarely cause pain or discomfort, but they may itch or sting.

o Genital warts in women appear mostly on the vulva, but they may also appear near the anus, cervix or vagina.

Genital warts in men generally appear on the penis or testicles, around the anus, or at the base of the throat and tongue.

- Common warts: Common warts appear as rough bumps, usually on the hands and fingers. In most cases, common warts are not only unsightly, but sometimes they can be painful or prone to bruising or bleeding.
- Plantar warts: Plantar warts are hard and granular growths that usually appear on the heel or toe. These warts may cause discomfort.

- Flat warts: flat warts are slightly raised and flat. These warts can appear anywhere on the body, but in children they usually appear on the face, in men on the bearded areas of the face, and in women on their legs.

This virus can remain hidden in the body for years and appear when the body's immune system fails.

Since it can lead to precancerous lesions, its timely diagnosis is very important.

Cervical cancer

Almost all cervical cancers are caused by HPV infections, but it can take up to 20 years or more for cervical cancer to develop after an HPV infection. HPV infection and early cervical cancer usually do not have serious symptoms. Getting the HPV vaccine is your best protection against cervical cancer.

Pap smear test

Since early cervical cancer has no symptoms, it is very important for women to have regular screening tests to detect any precancerous changes in the cervical area. Changes that may later cause cancer

According to new medical guidelines, it is recommended:

- Women under 25 years of age, because the immune system is strong, it is not recommended to do the HPV test unless the doctor deems it advisable, but it is necessary to do a pap smear test.

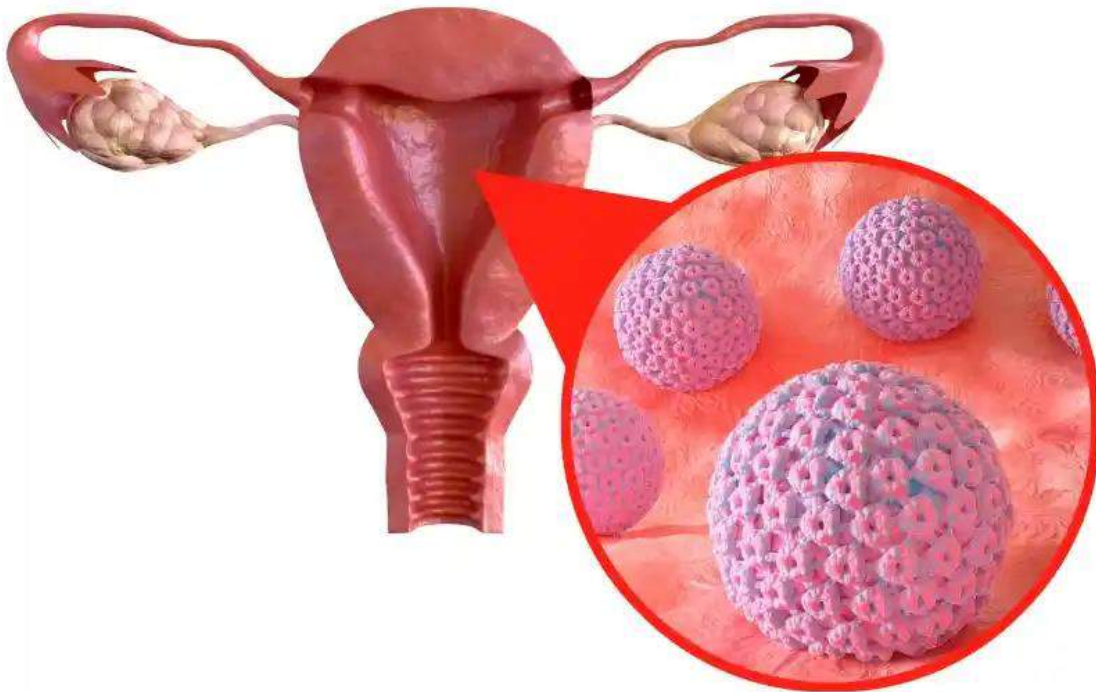
It is recommended for women aged 25 to 65 to perform Pap smear test with HPV DNA test once every three years.

- HPV vaccine:

- Today, it is said that boys and girls under the age of 12 should be given two injections at an interval of 6 months.

- For people over 12 years old, 3 doses of injection should be done. In the form of (0-2-6), it should be injected 2 months after the first injection and 6 months after the first vaccine injection.

HUMAN PAPILLOMAVIRUS



- If complete vaccination is done, a reminder dose should be injected 10 to 12 years later.
- What kind of vaccine should we give?
- If the person is not infected with the HPV virus, any type of vaccine can be given (2, 4 or 9 capacity).
- If the HPV test is positive (for example, 16 and 18), it is better to get a 9-potency vaccine. If type 6 or 11 is positive, the 2, 4 or 9 capacity vaccine can work.

What should we do if we are infected with the HPV virus?

1- Don't be afraid, any kind of it does not lead to cancer and we must definitely follow up.

2- If you are suffering from type 16 or 18, you must have a colposcopy where a biopsy is taken and based on the pathology results, the doctor will decide and guide you on the treatment.

3- If you were infected with other high-risk types of this virus, you should have a pap smear and HPV test every 6 months for 2 years. If after 2 years the same high-risk viruses are present, colposcopy should be performed.

4- If a person had a positive HPV test result one year, but the next year test result was negative, he should not think that the virus is gone, but the virus may be in a latent phase, and he should have a pap smear and HPV test every year for up to 3 years. If it is negative, he can check the relevant tests every 3 years.

- Last point:

Today, there is a lot of talk about not using tobacco and alcohol, smoking has two harmful effects on this virus, one is that it causes a behavioral change in the HPV virus (it makes the virus more destructive) and the other is that it affects the tissue of the uterus and cervix and the tissue Live weakens it.