

Measures to prevent and treat Human Papillomavirus infection



Human Papillomavirus in women

What do ASCUS, SIL, AGC, HPV mean? Do I have cancer? Is there any treatment? These acronyms tell us about the changes in the cytology we have had taken for cervical cancer prevention.

- **ASCUS** means there are abnormalities in the squamous cells of the neck of uncertain significance. Cells can be altered by infections, hormone deficiencies, postpartum, menopause and also by Papillomavirus (HPV) infection.
- **AGCUS** means there is glandular cell atypia of uncertain significance: in this case, the atypia is in the glandular epithelium of the cervix (endocervix).

- **SIL** means low (LSIL) or high (HSIL) grade squamous intraepithelial lesion. In this case, cells are altered and it is normally caused by the Papillomavirus. It is true that these alterations can occur in menopause due to the lack of estrogen which causes atrophy of the tissues and changes in the appearance of the cells. Low-grade SIL occurs mainly in young women (between 20 and 35 years old) and usually disappears spontaneously.
- **HPV /VPH:** These acronyms means Human Papilloma Virus. There are different genotypes (over 100) with different severity grades: there are low-risk HPV – related to genital warts - and high-risk HPV - more likely to cause cancer.

Cytology is a test which forms part of a woman's gynecological check-up. Its aim is to detect whether there is any **alteration in the cells of the lower genital tract** that could lead to cervical cancer over time.

Cervical cancer is an infectious disease that is mostly caused by the human Papillomavirus and is **the second most common cancer in women**. It is very important to know that the natural history of the disease caused by the Papillomavirus is lengthy and there is enough time to take action.

If there is an alteration in the cytology (which occurs between 4-7% of cytologies) it is imperative to do more studies. You should not be alarmed but trust your doctor.



After an abnormal cytology result, it is needed to carry out a more complete test, the colposcopy. During this test, the specialist studies the cervix in detail using a colposcope, a device with lenses of different magnifications. In order to see the cervix in detail, firstly

acetic acid is used and then Lugol. If necessary, more samples may be taken to perform a more accurate HPV test. This allow the specialist to know whether there is an infection by HPV and by what genotype (low or high-risk).

Causes of human Papillomavirus

90% of the women younger than 30 years old could have Papillomavirus on their genitals without any infection or injury. From that age onwards, the harmless presence of the virus decreases, so its presence needs more closely comprehensive monitoring in carrier patients.

Having the virus is a necessary but not sufficient condition to develop an infection and a pre-cancerous or cancerous lesion on the cervix.

Therefore, more circumstances are needed for the virus to cause damage: smoking, oral contraceptives, diets poor in vitamin C and A, immunodeficiency, some autoimmune diseases, having sex with multiple partners and from a very early age, etc.

The best measure to prevent infection by the virus is the vaccination of adolescent girls which is included in the Spanish vaccination calendar.



In this way, it should be pointed out that even if a woman has had sex she can and should be vaccinated as it reduces the possibility of the virus affecting her lower genital tract. The virus has to enter the cell to multiply and be harmful, and the antibodies produced by the vaccine prevent this aggression.

What worries young women is the appearance of abnormalities in their cytology, even more if the report shows that it coexists with an infection by Papillomavirus.

Protocol against the human Papillomavirus

Once the patient presents this anomaly, the following measures must be taken:

- Get vaccinated (if you have not yet).
- Quit smoking and use condom until your gynecologist recommends you what to do next.
- Have a colposcopy and a HPV test.
- If what is shown on the smear is confirmed, you can use a 6-month treatment locally, whether you need follow-up or surgical treatment.

In what does local treatment of human Papilloma consist?

Once the diagnosis has been confirmed, most low-grade lesions do not require any surgical treatment but a follow-up every six months.

In the interval between check-ups a local treatment could be established (the treatment is based on *Coriolus versicolor*, centella asiatica, hyaluronic acid, aloe vera, Bioecolia©, among other components) to reduce the presence of the virus, favour the normalization of the lesions that are present or prevent them from progressing.

After the product is applied, a film that has a waterproofing effect on the mucous membrane of the neck is formed, preventing it from being damaged during sexual intercourse. It re-epithelizes the neck and produces a re-balance in the microbiota, which is extremely important for preventing other infections and preventing the virus from proliferating. In short, it helps to normalize the lesions and promotes HPV clearance any injury to heal and ultimately promotes healing.



What is the end result of a human Papilloma treatment?

The virus clears in more than 60% of cases, compared to 40% without treatment.

About 85 % of the patients experience a normalisation of the ASCUS/SIL cervical lesions (under normal conditions, without treatment, only 65 % would do so spontaneously).

It can be used for both condyloma (external warts) and cervical lesions.

The recommended duration of the treatment is 6 months and it is easy to implement

Don't forget to consult your gynecologist; being well informed is the best way to do things right and, of course, to reassure yourself and provide a solution to improve your clinical picture.
