



Vaccination against cancer: for children and women



Cervical cancer is caused by so-called human papillomaviruses (HPV). In Switzerland, cervical cancer is the second most common cause of cancer-related death among young women under the age of 45 after breast cancer. This is also consistent with a first peak in the rate of new disease between the ages of 35 and 55, which is very early compared to other cancers. Years of intensive research have enabled an effective and safe vaccine against the most of these infections. Therefore, the vaccination of young girls and women up to the age of 26, but also for older women, especially if an infection has been overcome, is recommended.

Cervical cancer

is caused by infection with so-called human papillomaviruses (HPV). These viruses infect the mucous membranes in the genital area.

A distinction is made between high-risk HPV types that can cause cancer and low-risk types that can be mainly cause genital warts.

High-risk HPV types can lead to cervical cancer (cervical cancer) in a prolonged infection via cancer precursors.

Who is at risk?

Human papilloma viruses (HPV) are transmitted through sexual contact, prima-



rily through sexual intercourse. The viruses are very common.

Nearly 80% of women (and men) are thought to become infected with HPV at some point in their lifetime. In most cases, such an infection goes back on without being noticed at all, as the immune system successfully fights the infection.

Condoms reduce the risk of infection, but does not provide safe protection, as these viruses are present

throughout the genital area.

Since 2006, there has been the possibility of vaccination against certain types of human papillomaviruses.

The vaccine protects against infection with the nine most common HPV viruses (Types 6, 11, 16, 18, 31, 33, 45, 52 and 58). These types are responsible for more than 70% of cases of virus-related cancer.

In studies, the vaccines have successfully prevented persistent infections with HPV-6, 11, 16, 18, 31, 33, 45, 52 and 58, as well as cancer precursors caused by these HPV types.

Since vaccination protection is only safe if there is still no infection with HPV-virus, vaccination should ideally be carried out before the first sexual contact.

Vaccinated women should therefore also regularly take part in the free early diagnosis check-up for cervical cancer from the age of 20, in which a cell smear is taken from the cervix and cervix (Pap test). The smear examined for cell changes that could indicate pre-cancerous stages.

What are the vaccines made of?

The vaccine consists of so-called virus-like particles, which are genetically engineered. They correspond to the protein proteins that make up the virus envelope, but do not contain genetic information for the viruses. The vaccines cannot therefore trigger any infections or secondary disease.

Effectiveness of vaccination

The results of the studies with the vaccine are very good: Persistent infections with HPV-6,11, 16, 18, 31, 33, 45, 52 and 58 were 90 to 100% prevented, and cancer precursors caused by these viruses did not occur in the previous follow-up period of 90-100%.

The length of time vaccination protection lasts needs to be further investigated.

For full vaccination protection, two vaccinations are required before the age of 14, followed by three vaccinations in the upper arm within six to twelve months. Vaccination can be carried out by a paediatrician, family doctor or gynaecologist.

Tolerance of vaccination

The vaccine was very well tolerated in the studies. The most common side effect was a local reaction in the form of reddening and warming at the injection site. A temporary increase in temperature was observed in one in ten vaccinated. In the further course of 5

years of follow-up, no differences in the frequency of health disorders between vaccinated and non-vaccinated persons were found.

Reimbursement

Up to the age of 26 years, the costs of HPV vaccination will be covered within the framework of cantonal programmes.

But the vaccination also offers good protection at the age of 26 and should be considered especially after an HPV infection has been overcome.

In order for additional insurance to cover the costs, you will need to have your health insurance company approved.