

"HPV infection" and "HPV vaccine"

Information regarding "Catch-up vaccination"

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HPV infection is an infectious disease caused by the human papillomavirus (HPV), which is associated with the occurrence of many diseases, including cancers, such as cervical cancer, anal cancer, vaginal cancer, and pharyngeal cancer, as well as condyloma acuminatum (benign warts around the genitals).

HPV is primarily spread as a sexually transmitted infection, and it infects cells in the skin and mucous membranes. It is said that many people at the age of having sexual intercourse may have had an HPV infection. Approximately 90% of people have natural elimination of the HPV virus within several years after the HPV infection. However, it is reported that the HPV infection may lead to cancers when the HPV virus is not eliminated naturally and remains persistently infected for a long time. Now, over 100 types of HPV are reported to exist: among them, about 15 types (type 16, 18, 31, 33, 45, 52, 58, etc.) are known to have a high risk of developing cancer, and 2 types (type 6 and 11) are also known to cause condyloma acuminatum.

Cervical cancer (including carcinoma in situ) is a serious illness that accounts for the majority of cancers among young women, and begins to increase in the 20s and 30s, with the peak age of onset coinciding with the age of pregnancy and childbirth. More than 95% of cervical cancers are thought to be caused by an HPV infection. It is thought that the period from infection with HPV to the progression to cervical cancer is between several years to several decades. Among the several types of HPV, infection with HPV type 16 and 18, in particular, is likely to progress to precancerous condition and cervical cancer more frequently and rapidly. However, it is reported that infection with HPV type 16 and 18 can be prevented with the vaccination of HPV vaccine, so it is considered to be very important from the perspective of preventing cervical cancer. HPV vaccination has been shown to be effective in preventing precancerous conditions associated with cervical cancer, and in some countries where vaccination is already underway, it has been shown to be effective in preventing cervical cancer itself.

The HPV vaccine is included in the routine vaccination program, so those eligible for the routine vaccination (females aged between the 6th grade of elementary school and the 1st year of high school) can receive it at public expense (no out-of-pocket expense). In addition, due to the influence of the era when efforts to promote HPV vaccination were temporarily withheld (for example, due to the inability to provide sufficient information about the various symptoms that may occur after vaccination), the opportunity of the publicly funded "catch-up vaccination" program is currently available, for those who missed the regular HPV vaccine during the eligible age range. The catch-up vaccination program is available to women born between April 2, 1997 and April 1, 2007, and who have not received a total of three HPV vaccinations in the past. The

period of vaccination at public expense is three years from April 2022 to March 2025. For more information about the HPV vaccination, please check with the municipality where you have your residence card.

However, vaccination with the HPV vaccine cannot prevent all cervical cancers. A characteristic of cervical cancer is that it is difficult to notice because there are almost no early symptoms, so it is important to have regular checkups to detect it before it becomes cancer (precancerous condition) or in the early stages of cancer. It is recommended that women over the age of 20 undergo cervical cancer screening once every two years (regardless of whether they have received the HPV vaccine or not). Some local governments (wards, cities, towns, and villages) are working to allow women over the age of 20 to receive publicly funded cervical cancer screening, so please check the initiatives and implementation systems of each local government.

In summary, at present, it is important to prevent infection with HPV through HPV vaccinations and to have regular checkups for cervical cancer.

As cervical cancer progresses, symptoms such as “bleeding during sex”, “bleeding on days other than during menstruation”, and “increased vaginal discharge that is different from usual” may occur. If you notice any of these symptoms, please seek medical attention as soon as possible.

The HPV virus is known to cause not only cervical cancer but also cancers of the throat, penis, and anus. Additionally, condyloma acuminatum, a sexually transmitted infection, can be prevented with the HPV vaccine. In many countries, men are also vaccinated because it helps prevent them from infecting their partners in the future. At present, HPV vaccination for men is not part of the routine vaccination program in Japan, but it is possible to receive the HPV vaccine voluntarily (at your own expense).

It is thought that if the number of people infected with the HPV infection in society decreases, the number of diseases associated with it will also decrease. As many people acquire immunity to HPV through the HPV vaccination, a herd immunity effect is expected, and from a long-term perspective, this is also expected to reduce the incidence of cancer caused by HPV and eradicate cancer.

If you have any questions, please consult with the Health Care Center, TUFS.

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