centres. In New Zealand, HPV vaccination is offered via a school-based immunisation programme (to children in Year 8) or through a general practitioner.

Side effects from HPV vaccination

Like any vaccine or medicine, HPV vaccination can cause side effects. The most common side effects are mild and include:

- Pain, redness, or swelling in the arm where the injection was given
- Dizziness or fainting
- Nausea
- Headache

Is the vaccine safe?

The HPV vaccine is safe and effective. It can protect against diseases (including cancers) caused by HPV when given in the recommended age groups. The benefits of HPV vaccination far outweigh any potential risk of side effects.

Diagnosis of HPV and OPC

Your doctor can diagnose HPV or the disease that it causes by: checking your symptoms, doing an examination, doing a cervical screening test (for females), or taking a biopsy.

Is there a treatment or cure for HPV?

HPV infections with no symptoms have no specific treatment, and most clear up within a year. There is no cure for HPV. However there are a lot of things you can do to either prevent HPV or keep it from having a negative impact on your health. There are vaccines that can help protect you from ever getting certain types of HPV, warts can be removed by your doctor. The treatment of these warts includes medications or burning it by electric currents or freezing of the wart by using liquid nitrogen.

High-risk HPV (types 16 and 18) can usually be easily treated before it turns into cancer, which is why regular pap/HPV tests are very important. Although condoms and dental dams don't offer perfect protection, they can help lower your chances of getting HPV. In the event that you are infected by HPV and it has turned into a precancerous or cancerous growth, the treatment options available would be surgical removal along with chemotherapy and radiotherapy.

Acknowledgement:

Colgate Oral Care

FOR FURTHER ENQUIRIES

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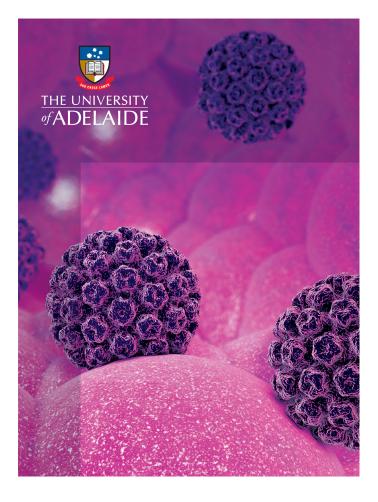
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HUMAN PAPILLOMAVIRUS & OROPHARYNGEAL CANCER

Information for Patients Special Topic Pamphlet No. 20

arcpoh.adelaide.edu.au/dperu



What is Human Papillomavirus?

Human Papillomavirus (HPV) is a common virus with more than 200 subtypes. Different subtypes can cause warts in different places. There are some subtypes of HPV that present as viral warts, such as common warts (usually affect hands, fingers and elbows), plantar warts (affect the soles of the feet) and plane warts (affect the face, shins and back of hands). These viral warts are non-cancerous skin growths and are most common in children and adolescents. However there are other subtypes of HPV that can be spread through sexual contact with someone who is infected with HPV. About 80 percent of sexually active people are infected with HPV at some point in their lives, but most people never know they have the virus. In most cases, HPV goes away on its own and does not cause any health problems. But when HPV does not go away, it can cause serious health problems like genital warts and cancer.

If you are infected with a type of HPV that causes cancer, the virus can cause changes to the cells. HPV can infect the mouth and throat and cause cancers of the oropharynx (back of the throat, including the base of the tongue and tonsils).

What is the Oropharynx?

The Oropharynx is the back of the mouth and throat region of the oral cavity (Figure 1), it includes the tonsils, base of the tongue, soft palate and pharyngeal walls (the side and back walls of the throat).

What is Oropharyngeal Cancer?

Cancer involving the oropharynx and its parts is called oropharyngeal cancer (OPC). It is primarily associated with HPV subtypes 16 and 18.

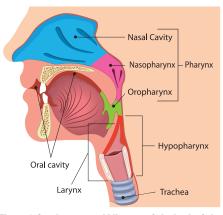


Figure 1: Oropharynx - middle part of the back of the throat

Human Papillomavirus infection

HPV is commonly seen causing infection of the cervix, vulva, vagina, penis and anus, and some head and neck sites. Infection can manifest in the form of warts or papillary growth, which are benign in nature (Figure 2).



Figure 2: Benign HPV associated warts (circled)

Symptoms of Oropharyngeal Cancer (OPC)

Symptoms of OPC may include

- Sores in the throat or in the back of the mouth which do not heal for more than 2 weeks (this is the most common symptom).
- Red or white patch on the back of the throat or tonsils.
- Lump in the throat which could lead to swallowing and breathing difficulties.
- Persistent sore throat or feeling that something is caught in the throat like a thread or a lump.
- · Hoarseness or change in voice.
- Numbness of the throat and difficulty in swallowing.
- Spontaneous pain or bleeding from the throat which can be observed when a person spits or coughs.
- Difficulty in moving the jaws or tongue.
- Ear and/or jaw pain.
- Unexplained weight loss with feelings of fatigue.
- Loss of appetite, especially when prolonged; this may happen during the later stages of the disease.
- Some people have no symptoms. If you have any symptoms that worry you, be sure to see your doctor right away.

Risk Factors for HPV and OPC?

Risk factors for HPV and OPC include:

- · Not being vaccinated and being sexually active
- Early onset of sexual activity
- Multiple sexual partners
- · Oral-genital sexual behaviours
- Avoiding use of protected sexual practices e.g. condoms
- · Tobacco smoking
- · Alcohol consumption
- Immune suppressed states

Prevention of HPV infections and Oropharyngeal Cancer

There are things you can do to prevent or lower your chances of getting HPV, and include:

- 1. Early vaccination (Cervarix and Gardasil 9)
- If you are sexually active, ensure you engage in protective sexual practices – proper use of condoms, dental dams etc. (Note that HPV can infect areas not covered by a condom so condoms may not fully protect against getting HPV).
- **3.** Be in a mutually monogamous relationship
- **4.** Get screened for cervical cancer women should have regular pap smear tests
- **5.** Don't smoke or use smokeless tobacco products, and avoid smoke from other people's cigarettes.
- 6. Limit the amount of alcohol you drink.

Vaccinations against HPV

Two commercially available vaccines on the market for HPV infections and prevention against cervical and oropharyngeal cancer are Cervarix and Gardasil 9. Two doses of the HPV vaccine are recommended for all boys and girls at ages 11–12 years; the vaccine can be given as early as age 9 years (if older, they may need three doses instead of two). HPV vaccination is also recommended for everyone through to the age of 26 years, if not vaccinated already.

Vaccination is not recommended for everyone older than age 26 years. However, some adults aged 27 to 45 years who are not vaccinated may decide to get the HPV vaccine after speaking with their doctor about their risk for new HPV infections and the possible benefits of vaccination. HPV vaccination in this age range provides less benefit, as more people have already been exposed to HPV. HPV vaccination falls under the National Immunization Scheme in Australia and is now provided free of cost in schools and health care