

## Introduction

### Aetiology and Epidemiology:

- **Caused by Human Papilloma Virus (HPV)** genital types of which there are >40
- **Visible genital warts** usually **type 6 and 11**
- **Main high risk oncogenic types are 16 and 18** - found in pre-malignant conditions such as cervical intraepithelial neoplasia (**CIN**) and vulval intraepithelial neoplasia (**VIN**), and in sub-clinical cervical and vulval infection
- **Lifetime risk of infection ~ 80%**
- **Prevalence** of infection in **young sexually active people <25 is ~ 20%** - however clinical genital warts are much less common
- **Average duration of HPV infection = 6-18 months** but may be significantly longer, and long term latent infection is possible
- Infection with multiple different types over time is possible
- Transmission is via skin contact - condoms are not fully protective, extent of infectivity of sub-clinical infection is uncertain

### Symptoms and signs:

#### Symptoms:

- Genital lumps (in **women** commonly **vulval or perianal**, in **men** commonly **glans penis, coronal sulcus, shaft, scrotum**, or **perianal**)
- May be itchy or painful, may bleed

#### Signs:

- Condylomata acuminata on examination – may also involve vagina and cervix in women

#### Note:

The presence of perianal lesions is not necessarily associated with anal intercourse

## Diagnosis

- **Diagnosis** is made on **clinical grounds**
- **Atypical lesions or diagnosis uncertain – consider biopsy**
- **HPV typing not recommended**

## Management

### General:

- **The goal of treatment is cosmetic rather than curative**, therefore non-treatment is an option at any stage
- Genital warts can cause significant emotional distress due to fear of social stigmatisation and lesions can be of aesthetic concern

### Vaginal warts:

- Treatment options should be discussed with the patient - since vaginal warts are not generally evident to the patient, **non-treatment is an option** if the warts are not extensive
- **Vaginal warts should only be treated with Cryotherapy**

### Cervical warts:

- If the patient's **cervical smear history is normal**, the warts may be treated with **Cryotherapy**
- If the patient has had an **abnormal smear**, the cervical warts **should not be treated, and the patient should be referred for colposcopy**

### Anal warts:

- Patients **with perianal warts who have anorectal** symptoms (e.g. bleeding, pain or discharge) should have **anoscopic evaluation, treatment of anorectal warts if present, and STI testing if appropriate**

## Treatment Options

### Provider applied:

- **Cryotherapy** using liquid nitrogen or CO2

### Patient applied:

- **Podophyllotoxin (Condyline™) bd 3 consecutive days per week for 5 weeks**
- **Imiquimod (Aldara™) od 3 x weekly for up to 16 weeks**

### Pregnancy:

- **Cryotherapy** using liquid nitrogen or CO2 only
- **Imiquimod and podophyllotoxin are not safe for use in pregnancy**

### Specialist only:

- **Hyfrecation**
- **Laser**

## Notes

### 1. Podophyllotoxin:

- Use with caution as a patient applied treatment in women as visualisation of warts may be difficult
- **Not generally effective for highly keratinised warts**
- Suitable for small numbers of exophytic warts on keratinised skin

### 2. Imiquimod:

- Suitable for **women and men, may be more effective for minimally keratinised warts** (e.g. introital, perianal, subpreputial)

**Note:**

Prices may vary, and online options via CyberChemist are available  
[www.chemist.co.nz/aldara](http://www.chemist.co.nz/aldara)

### 3. Side Effects:

Both imiquimod and podophyllotoxin can cause erythema, irritation, erosions or ulcerations. Mild side effects are common and it is reasonable to treat through these, but if moderate or severe side effects occur it is recommended that a break from treatment be taken, and that therapy be reintroduced slowly with a reduction in dosing frequency if necessary.

## Vaccination

### A prophylactic HPV vaccine is now available in New Zealand:

- **Gardasil™** is a quadrivalent prophylactic vaccine for **HPV 6,11,16,and 18** and is licensed for administration to females from the ages of 9 to 26 and males from the ages of 9 to 15
- Current recommendations are for the vaccination of girls and young women preferably prior to sexual debut, although benefit has been shown up to the age of 26
- The vaccination schedule is 3 doses spread over 6 months – 0, 2 and 6 months
- Gardasil™ is not currently funded by the MOH
- The vaccine may be obtained by healthcare providers from CSL NZ LTD at a cost of \$128.50 + GST per dose
- For further information the following websites are useful

[www.medsafe.govt.nz](http://www.medsafe.govt.nz)

[www.gardasil.co.nz](http://www.gardasil.co.nz)

**Cervarix** is a bivalent vaccine for **HPV 16 and 18** and is **currently undergoing the registration process in New Zealand**

## Contact tracing

Not required, but it is **suggested that sexual partners have a sexual health screen**

## Referral guidelines

**Referral to a Specialist Sexual Health Service is recommended for:**

- Management of warts if clinician wishes
- Management of cervical warts
- Management of genital warts in pregnancy, immunosuppression, diabetes
- Management of extensive genital warts likely to require hyfrecation/laser
- HIV positive clients

## Further information

An in-depth guideline for the management of genital HPV has been produced by the Professional Advisory Board of the Australian and New Zealand HPV Project at : [www.hpv.org.nz](http://www.hpv.org.nz)

# Genital Warts