Aotearoa New Zealand STI Management Guidelines for Use in Primary Care

Genital warts

Cause

- Genital warts are caused by human papillomavirus (HPV)
- 90% of genital warts are caused by HPV 6 or 11

Overview

- Genital warts are caused by human papillomavirus (HPV)
- There are more than 100 types of HPV, with over 40 types which can infect the anogenital and oropharyngeal mucosa. HPV can be divided into low-risk and high-risk types, based on their association with the development of malignancy
- 90% of genital warts are caused by HPV 6 or 11. These are low-risk types of HPV, which are generally not associated with malignancy
- HPV is almost universal among sexually active populations. It can be regarded as an inevitable consequence of being a sexually active adult
- Transmission is from skin-to-skin contact, and can occur through penetrative and non-penetrative sex, as well as sexual activity through fingers or sex toys from genital areas infected with HPV
- Most anogenital HPV infections are asymptomatic. Most HPV infection is transient and often becomes undetectable within 12 months. HPV infection may become latent, and reactivate after several years, or infection may persist. Because HPV infection may remain latent for some time, developing warts during a long-term relationship does not necessarily imply the presence of other sexual contacts
- Immunity from natural infection is poor. Previous infection does not necessarily create long-term immune memory, so may not prevent future

infection with the same HPV type. Vaccination provides effective long-term protection against HPV acquisition
- Gardasil 9 vaccination is funded for people aged 9-26 years, and protects against the types of HPV that cause most genital warts, as well as 7 types of oncogenic HPV
- Vaccination has reduced the prevalence of genital warts in younger age groups, and is recommended for those who are eligible, even if already sexually active

Clinical presentation

Site of warts	Signs and symptoms
Anogenital skin	Warty growths in and around anogenital skin. Little discomfort (sometimes itchy) Psychological distress may be significant
Penile urethra	Distorted urinary stream or bleeding with urethral lesions
Cervix	Cervical lesions noted on vaginal examination May cause mild transient cervical smear abnormalities
Anal lesions	Rectal bleeding may occur after passage of stools with anal lesions

Recommended tests

- Genital warts are clinically diagnosed, based on characteristic appearance. Consider biopsy if lesions are atypical
- HPV DNA testing is currently available only as an adjunct to cervical cytology. HPV DNA testing has no clinical utility in sexually transmitted infection (STI) screening
- A complete sexual health check may be appropriate, depending on sexual history

Management

- The goal of treatment is to eliminate warts that cause physical or psychological symptoms
- The elimination of external visible warts may not decrease infectivity since

the warts may not represent the entire viral burden. For this reason recurrence is common, especially in the first 3 months

Treatment	Comment
No treatment	An option for asymptomatic warts. 30% of patients will experience spontaneous clearance of warts over a 6-month period.
Cryotherapy	Can be repeated weekly until clearance. This is the only treatment suitable in pregnancy.
Podophyllotoxin 0.5% solution	Apply carefully to warts twice daily for 3 consecutive days, followed by 4 days rest each week, until warts have resolved, or for a maximum of 5 consecutive weeks Not for use in pregnancy (or if partner is pregnant) or breastfeeding – teratogenic Patients must be able to visualise, identify and reach their warts, as the solution must not come in contact with normal skin. For these reasons, podophyllotoxin has very limited utility for vulvovaginal warts
Imiquimod 5% cream	Apply to affected area at bedtime 3 times per week (alternate days), wash off in the morning Can be used for up to 16 weeks, although the majority who clear their warts will do so by 8 weeks Monthly review recommended Local skin reactions are common, but rarely result in discontinuation of treatment Use with caution in patients with autoimmune conditions or those on systemic immunosuppressant drugs (discussion with specialist recommended) Not for use in pregnancy

Special situations

Situation	Recommendation
Pregnancy	Cryotherapy Smaller genital warts may not require treatment as spontaneous resolution often occurs after delivery. Genital warts are not a contraindication to vaginal delivery. Caesarean section is only indicated when genital warts are likely to cause obstruction of the pelvic outlet or excessive bleeding

Immunocompromised patients	May respond less well to therapy for genital warts, and may have more frequent recurrences after treatment. Manage in consultation with a sexual health specialist as well as other specialists involved in the patient's care.
Urethral warts	Refer for specialist management (risk of stenosis with over-zealous treatment)
Cervical or vaginal warts	High rate of spontaneous resolution – consider no treatment Follow up at 6 months, refer if still present Cryotherapy possible Cervical smear not indicated unless due
Intra-anal warts	Refer for specialist management

- Consideration should be given for a change in treatment modality or onward referral if there is no significant response within 4-6 weeks
- A continuing lack of response to therapy might indicate other pathology and a referral for assessment should be considered in such cases
- Saltwater baths can sooth and heal the genital skin during treatment
- Avoid shaving or waxing as this may spread the warts
- There is no need to alter sexual activity with a regular partner, as sharing of HPV would have occurred long before the clinical appearance of the lesions
- Consistent condom use has been shown to reduce the risk of HPV acquisition and genital warts by 30-60%, and is recommended if new sexual contact

Partner notification and management of sexual contacts

- Not indicated

Follow up

• Not required if symptoms resolve • Review if patient anxious, warts are difficult to visualise, or poor response to treatment

Indications for specialist referral

Referral to or discussion with a sexual health specialist is recommended for:

- Lack of response to therapy
- If diagnosis is not clear, and second opinion required
- Immunocompromised patients with genital warts
- Urethral warts
- Cervical warts which are still present after 6 months
- Intra-anal warts

Auditable outcomes

- 100% of patients aged under 27 years are offered Gardasil vaccination
- 100% of patients diagnosed are offered treatment

Useful patient resources

The New Zealand HPV Project

Endorsement: These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

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