

ASSESS IF:

- Symptom of lumps in genital area.
- Having sexual health check (male and female).
- As part of assessment of genital symptoms.

DIAGNOSIS AND TESTING

BY CLINICAL EXAMINATION

- Document findings.
- Speculum examination in women and genital and perianal examination in both genders.
- Distinguish from normal anatomical variants, e.g. pearly penile papules (coronal papillae), vestibular papillomatosis, Fordyce glands etc., and from Molluscum contagiosum.
- If benign appearance and diagnosis uncertain, observe and arrange follow-up review.
- Offer screening for other STIs including serology.

ASSESSMENT FOR TREATMENT MODALITY

- Decision made on case-by-case basis on discussion with patient.
- Consider:
 - Gender
 - Pregnancy
 - Site of lesions
 - Size and number of lesions and degree of keratinisation
 - Patient preference and social circumstances.

TREATMENT OPTIONS (see guideline for details)

- None:** Treatment is largely cosmetic and no treatment is an option.
- Cryotherapy:** For treatment of small numbers of warts.
- Patient applied:**
- Podophyllotoxin solution 0.5% twice daily 3 consecutive days per week for 5 weeks – for men only, for use on lesions which can be visualised by patient.
 - Imiquimod cream 5% once daily 3 x weekly for up to 16 weeks - for warts not responsive to podophyllotoxin or in areas not easily visualised.
- Specialist settings:** Diathermy, laser or surgery.
- Combination:** Cryotherapy plus podophyllotoxin or imiquimod.
- Other management:**
- Lignocaine 2% gel post-treatment.
 - Counselling and education.
- Special situations:** See detailed NZ HPV Project guideline www.hpv.org.nz.
- Pregnancy:** Cryotherapy is the only recommended treatment option.
- Children:** Refer to paediatrician.
- Specialist referral:**
- Atypical warts (including pigmented lesions).
 - For treatment on clinician request.
 - Intravaginal/cervical warts.
 - Anal warts.

PARTNER MANAGEMENT

- Contact tracing not required.
- Partners should be offered a sexual health check and education.

FOLLOW-UP

- Follow-up at end of course of treatment is recommended to check on response to treatment.

PREVENTION

- Quadrivalent vaccine, currently on schedule for year 8 girls.

Further guideline information – www.nzshs.org www.hpv.org.nz or phone the local sexual health service.

This Best Practice Guide has been produced by NZSHS, and is adapted from the CMDHB Best Practice Guideline. Every effort has been taken to ensure that the information in this guideline is correct at the time of publishing (July 2012).

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Introduction

- **Caused by human papilloma virus (HPV)** – greater than 40 genital types.
- Visible genital warts usually due to types 6 and 11.
- Main high risk types 16 and 18 are 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 HPV infection ~80%.**
- **Prevalence** of infection in **young sexually active people under-25 is ~20%**, however clinical genital warts are much less common.
- Average duration of HPV infection is ~18-24 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.

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

- Genital lumps 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**.
- Distinguish from anatomical variants, e.g. pearly penile papules (coronal papillae), vestibular papillomatosis, Fordyce glands etc., and from Molluscum contagiosum.

Management

- **The goal of treatment is cosmetic rather than curative**, therefore no 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.
- Women with genital warts should have cervical smears as recommended by the National Cervical Screening Programme guidelines.
- Regular review is recommended to ensure treatment efficacy and tolerability.

Vaginal warts

- Treatment options should be discussed with the patient – since vaginal warts are not generally evident to the patient, no treatment is an option if the warts are not extensive.
- Consider specialist referral to sexual health clinic or gynaecology clinic if extensive.

Cervical warts

- All women with cervical warts require follow-up to ensure resolution and should be discussed with a gynaecologist or sexual health physician.
- Women with abnormal cervical smears should be managed according to the National Cervical Screening Programme guidelines <http://www.nsu.govt.nz/current-nsu-programmes/national-cervical-screening-programme.aspx>.

Anal warts

- Patients with **perianal warts who have anorectal** symptoms should be referred for specialist review.

Treatment regimens

Patient applied

Podophyllotoxin (Condyline™) solution 0.5% twice daily 3 consecutive days per week for 5 weeks.

- For men only, for use on warts which can be visualized by patient.
- To be used with caution – can cause significant ulceration if not applied appropriately.
- Suitable for small numbers of warts on keratinized skin.
- In general, podophyllotoxin is not suitable for women or on perianal warts.
- If mild skin irritation, can often continue treatment with protection of surrounding skin by use of Vaseline.
- Must not be used in pregnancy.

Imiquimod (Aldara™) cream 5% once daily 3 times weekly for up to 16 weeks.

- Fully subsidised on Special Authority for warts that are not easily visualised or not responding to podophyllotoxin (see www.pharmac.govt.nz/PharmaceuticalSchedule/SAForms).
- Suitable for **women and men with minimally keratinised warts** (e.g. introital, perianal, subpreputial).
- Can cause erythema, irritation and ulceration. Mild effects are expected. If moderate to severe side effects occur, it is recommended that a break from treatment is taken, with gradual reintroduction.
- Not recommended in pregnancy.

Clinician applied

Cryotherapy using liquid nitrogen or CO₂ to produce an iceball on visible lesions.

- Offer lignocaine gel 2% for post-treatment discomfort.
- Repeat weekly up to 6 weeks.
- Review treatment plan if persistent warts after 6 treatments.

Specialist level treatment

- **Diathermy**
- **Laser**
- **Surgery**
Consider in management of more extensive warts. Risk of higher morbidity.

Combination treatment

- More than one treatment may be used simultaneously or sequentially.
 - Podophyllotoxin 0.5% solution at the time of cryotherapy or cryotherapy of larger lesions, followed by imiquimod cream 5%.
- There is some evidence to support combination treatments but monitoring of side effects is important.

Pregnancy

- Cryotherapy is the only recommended treatment modality in pregnancy.
- Extensive warts require specialist review.
- Podophyllotoxin and imiquimod are contraindicated in pregnancy.

Partner notification and management of sexual partners

- Not required, but it is recommended that sexual partners have a sexual health check.
- Advise patients that partners should be informed of diagnosis (see www.hpv.org.nz for further information).

Follow-up

- Follow-up until there are no visible warts may decrease the chance of recurrence.
- Relapses are treated as appropriate to site and size.

Prevention

- The quadrivalent HPV vaccine prevents 90% of anogenital warts.
- It is included in the immunization schedule for girls in year 8 (12 years).
- See www.immune.org.nz/vaccines/gardasil%20%AE for further information.

Referral guidelines

Referral to a specialist sexual health service is recommended for:

- Management of warts if clinician wishes.
- Monitoring of cervical warts (or discuss with specialist).
- Management of anogenital warts in pregnancy, immunosuppression, diabetes.
- Management of extensive anogenital warts.
- HIV positive patients.

Further information

An in-depth guideline for the management of anogenital HPV has been produced by the Professional Advisory Board of the New Zealand HPV Project www.hpv.org.nz.

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