MSHC
MELBOURNE SEXUAL HEALTH CENTRE

Anogenital warts & HPV treatment guidelines

Anogenital warts is a common STI, caused by the human papilloma virus (HPV) and can be passed on by skin-to-skin contact during sex.

Types

Most anogenital warts are caused by HPV types 6 and 11.

Causes

Low risk HPV types

- 90% of anogenital warts are caused by HPV 6 and 11, usually asymptomatic
- About 80% of HPV infections resolve within 12 - 24 months via immune clearance
- The quadrivalent and nonavalent vaccines (Gardasil® and Gardasil® 9) provide excellent protection against HPV 6 and 11, but need to be given prior to commencement of sexual activity to be most effective

High risk HPV types

- HPV 16 is the most common high-risk type of HPV. Usually asymptomatic, even though it can bring about cervical changes
- HPV 18 is another high-risk type of HPV. Like HPV 16, its usually asymptomatic, but it can lead to cervical cancer
- HPV 16 and HPV 18 are together responsible for approximately 70% of all cervical cancers worldwide
- The HPV vaccine can protect against HPV 16 and HPV 18

All HPV types

- Most HPV infection is asymptomatic
- Condoms offer some protection against HPV infection, but this is limited as infection is usually multi-focal and often involves surfaces not covered by condoms
- The rate of transmission from mother to baby is estimated to be between 1:80 to 1:1500 affected women, and is thought to occur through direct contact in the birth canal

Clinical presentation

- Warty growths with little discomfort (can be sometimes itchy)
- Psychological distress can be significant
- PR bleeding after passage of stools with anal lesions
- HPV infections in young children can include conjunctival, oral and pharyngeal disease, the most severe of which is juvenile-onset respiratory papillomatosis (JRP)
    - JRP is rare, with an estimated incidence of around 4 per 100,000 children, and mostly occurs in children born to mothers

with anogenital warts during pregnancy
- Malignancy is associated with persistent oncogenic genotypes (cervical, vulval, vaginal, penile, anal, oropharynx)

Diagnosis

Diagnosis of warts is by visual inspection.

Biopsy should be considered for:

- atypical looking warts
- warts not responding to standard treatment
- cervical warts

Management

Choice of treatment depends on the number, size, degree of keratinisation, distribution, area affected, patient preference and pregnancy status.

Treatment of warts ameliorates symptoms but is not curative.

Asymptomatic infection cannot be treated.

Condition	Recommended	Comments
Warts which are soft, vulvar or perianal, on mucosal surfaces, on or under the prepuce or on the perianal area	**Imiquimod 5% cream in sachets or pump, 1/3 to 1 sachet 3 times a week for 4–16 weeks** OR **Podophyllotoxin 0.5% solution (Condyline Paint ™) or 0.15% cream (Wartec® cream) twice daily for 3 consecutive days then none for 4 days. Use for 4 weeks, then review.**	Imiquimod: Always give patients an instruction sheet and warn regarding potential local irritation. Review every 4 weeks. Do not use imiquimod: • in pregnancy (Category B) or for lactating women • in patients under 18 (no studies done) • in patients with co-existing dermatitis • on vaginal or cervical warts, and intra-anal warts at the dentate line. Warts involving the squamous epithelium of the distal anal canal can be treated with imiquimod Podophyllotoxin: Warn patients regarding potential local irritation: • contraindicated in pregnancy • do not use on vaginal or cervical warts • take care when treating anal warts because solution can be difficult to apply accurately. Consider partner-applied application or use podophyllotoxin cream instead • do not use on areas of skin affected by dermatitis
Keratinised warts, or those which are of long standing	**Cryotherapy-**applied by liquid nitrogen cryospray or by cryoprobe	Is well tolerated and very unlikely to result in scarring. The only contraindication is cryoglobulinaemia. The application of 5% lignocaine ointment or EMLA cream before treatment may help diminish discomfort. Combined therapies may be used such as imiquimod to debulk a large area of warts prior to cryotherapy, or vice versa

Condition	Recommended	Comments
Large warts where other treatments have failed or are not tolerated.	**Surgical ablation** – by laser, diathermy or excision under general anaesthesia	Surgery will not remove HPV which can result in recurrent warts after surgery. Long term complications are very rare and include hypo or hyper pigmentation and vulvodynia after surgery for extensive warts.
Warts in pregnancy	**Expectant management** OR **Cryotherapy** OR **Trichloroacetic acid** OR **Surgical ablation**	Expectant management is reasonable as the warts will usually improve spontaneously following pregnancy, and treatment does not alter risk of neonatal transmission. It is common for genital warts to recur or increase in size or number during pregnancy, and to resolve post-delivery. Podophyllin, podophyllotoxin, interferon and 5 FU are contraindicated in pregnancy. Imiquimod is not recommended due to limited safety information. Surgical ablation is reserved for large obstructive lesions and should be deferred until the third trimester to minimise recurrence. There is a risk of preterm labour. There is no strong evidence that caesarean section reduces the incidence of transmission, therefore this is only recommended if lesions are obstructive or causing extensive cervical disease. Treatment of the warts does not alter viral shedding or potential vertical transmission

Follow up

Follow up is not required if symptoms resolve.

Review if warts require more than one treatment.

Contact tracing & partner management

Not recommended. The majority of partners are likely to be-infected subclinically.