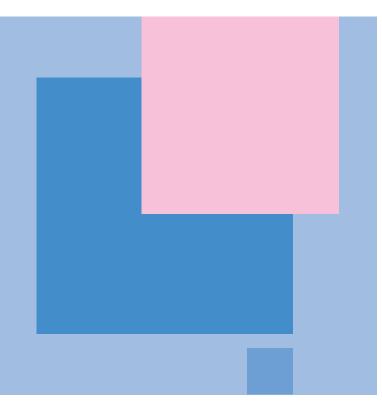


# Viral Warts



• Warts are a common viral infection of the skin caused by the human papillomavirus (HPV). There are more than 100 subtypes of HPV.

- Warts occur most commonly in children and young adults. It can, however, occur at any age.
- Warts may be transmitted between individuals by skin-to-skin contact or from the environment (eg. swimming pool decks, change room floors). They can spread from one area of the body to another within the same patient. It may take one to six months for warts to appear after initial infection.
- Although harmless, warts can occasionally be painful.
- Although they can occur on almost any skin surface, warts most commonly occur on the hands, fingers and feet.
- Laboratory tests of HPV infection are usually unnecessary as the diagnosis is usually straightforward.

#### Types of viral warts

- Common warts most commonly occur on the hands and around the nails. They may occur as single or multiple lesions, and appear as flesh-coloured nodules with a rough surface and small pit-point blood vessels. They may bleed if the surface is scratched or pared.
- Flat warts occur commonly on the face, neck, arms, and legs. They are usually seen as smooth, flesh-coloured, pink or brown, flat-topped papules.
- Plantar warts occur on the soles of the feet and toes and may be painful on pressure (eg. walking). It may be difficult to differentiate from corns (calluses).
- Ano-genital warts occur around the genitals and are uncommon in children. Although most often transmitted sexually in adults, this is rarely the case in children, when it can occur through non-sexual contact.

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#### Treatment of viral warts

- Watchful waiting: In children, warts may resolve spontaneously. However, this may take up to two years to occur.
- Topicals
  - Retinoids or imiquimod: These may be used for flat warts.
  - Duofilm or verrumal: These may be more effective when combined with occlusion with duct tape.
- Cryotherapy with or without paring.
- Electrosurgery and lasers: Rarely used in children as they can cause significant pain.
- Even when the wart appears "cured", there is a 20% risk of recurrence, either at the same or other site(s).

### Cryotherapy

- Highly effective therapy for warts
- May be painful and therefore may not be suitable for younger patients.
- Liquid nitrogen, at a temperature of -196°C, is applied to the wart, with a cotton-tipped applicator or via a spray gun, for 10 to 20 seconds. The number of applications per treatment session depends on the size of the wart and its location.
- Treatment is best repeated at one to three weeks intervals.
- A blister may form at the site of cryotherapy. If the blister is small, it may be left alone. If the blister is large and painful, come back to the clinic for treatment of the blister. When the blister heals, the wart may also disappear.



## Useful telephone number Central Appointments

6294-4050



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