

## Viral Warts

### What Are Viral Warts?

Warts are harmless skin growths caused by an infection by the human papilloma virus.

### Where do warts occur and what do they look like?

Warts can grow along any part of the body. (Fig. 1)

Common clinical subtypes are:

- Palmar-plantar warts (most common). Located on palms or soles. (Fig. 2)
- Plane warts - usually on the face or arms. (Fig. 3)
- Genital warts (condylomata acuminata) - this is classified as one of the sexually transmitted diseases

They have a rough surface and may have tiny dark dots on them. Warts on the soles of the feet are often painful, especially with standing. They may bleed if traumatized.

### Are warts contagious and can they turn cancerous?

Viral warts are contagious and caught by contact with virally-infected skin scales: these are usually encountered on such surfaces as the floors of public locker rooms, shower cubicles and the tiled areas around swimming pools. The virus enters the skin through tiny breaks in the skin surface, and moistness and tiny breaks of the skin make infection with the wart virus easier. Common warts never turn cancerous, and warts on the genitalia are usually sexually transmitted.

### How are warts diagnosed?

Usually this is easy, and based simply on the appearance. However, sometimes it may be hard to tell a plantar wart from a corn. One helpful point is that plantar warts interrupt the fine skin ridges on the sole, whereas corns do not. Your dermatologist may need to pare down the area to be certain of the diagnosis: he/she will be looking for the small black dots which confirm the diagnosis of a viral wart. No other investigations are needed.

### How are warts treated?

There is no perfect treatment for warts. Treatment consists of destroying the skin where the wart appears on. This can be done by carbon dioxide laser, electrocautery (destruction with a weak electrical current), freezing (with liquid nitrogen), or with chemicals such as salicylic acid, 5-fluorouracil or imiquimod. The choice of treatment depends on the site and size of the wart and the clinical judgement of the dermatologist.

Sometimes new warts form while existing ones are being destroyed. All we can do is to treat the new warts when they become large enough to be seen. No matter what treatment is used, warts occasionally fail to disappear. Warts may return weeks or even months after an apparent cure. There is no need to worry if a wart recurs; just consult your dermatologist for further therapy. The treatment may be repeated, or a different method may be used to get rid of the warts.

### What is liquid nitrogen therapy and how is it administered?

Freezing the warts with liquid nitrogen, a very cold substance, may be done either with a cotton bud or through a spray. The treatment may be slightly painful and a blister may form at the treatment site. The wart is lifted and may fall off once the blister dries.

A painkiller may be taken to reduce the pain after treatment. There is no need to cover the treated areas if the blisters are intact. However, if the blisters are large and tense, they may be pricked by a clean needle sterilized in flame. A simple dry dressing may be applied. Do not apply any other topical treatment concurrently unless advised by your dermatologist. A week has to lapse between treatments, even if a blister does not form.

### How do I prevent viral warts?

Warts are contagious and may spread from one part of the body to another or to other people. Those with plantar warts are advised not to share footwear or to walk around the house barefoot. Likewise, sharing of personal items such as towels is discouraged. Personal hygiene is encouraged and keep treated areas dry and clean, as a moist environment is conducive to the growth and spread of viral warts. Regular swimmers are advised to avoid swimming until the warts have completely resolved.



Figure 1: Common viral warts on the thumbs and adjacent to the nail (periungual)

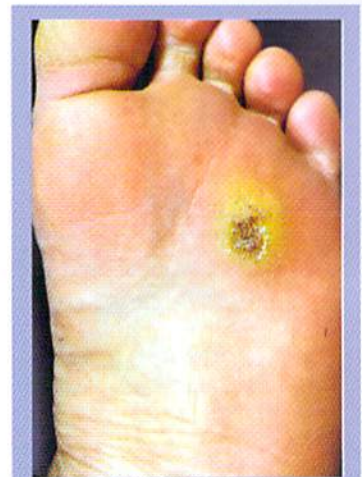


Figure 2: Plantar warts on the sole of the foot



Figure 3: Plane warts on the cheek