

This leaflet aims to provide information about:

- Warts: what they are, what they look like, how they are transmitted
- General treatment guidelines
- Common complications
- Criteria for dermatology referral

Warts are benign growth on the skin caused by HPV infection. In children, they are commonly found on hands and feet. They typically are characterized as hyperkeratotic verrucous papules.

The virus is spread by direct skin-to-skin contact, or by contact with contaminated objects (like towels or sponges). It can also spread to other parts of the body by scratching or touching a lesion (autoinoculation).

To prevent spreading of warts or acquiring new warts:

- Wash hands frequently
- Avoid walking barefoot in public places (pool, locker rooms, gyms)
- Avoid sharing towels, clothing, shoes or other personal items
- Keep hands and feet dry - avoid moist environments
- Avoid scratching or picking a wart
- Avoid biting fingernails as this may create little breaks in the skin for the virus to enter and develop into a new wart
- Cover visible lesions with bandages if participating in contact sports or watertight bandages if swimming
- Clean toys and sports equipment frequently

Treatment

Treatment of warts is not always necessary. Even without treatment, around 50% of warts in children disappear within 6 months; and 90% are gone in 2 years. However, certain treatment options can be offered to the patient if the warts become *painful, bleeding, bothersome, or are beginning to spread*. Although these options may potentially decrease time to resolution, there is no cure for warts and there is no single treatment is considered most effective. Some warts may require numerous clinic visits, a long treatment course, or more than one type of treatment. In addition, warts may recur after treatment.

Options for active treatment

- Retinoids (vitamin A acid derivatives)
 - Stieva-A 0.05-0.1%, Retin-A Micro Gel 0.1%, Differin XP
 - Use on thin and flat warts or facial warts.
 - Apply to individual lesions at bedtime.
 - These creams can cause local irritation at the site of the wart to help the body's own immune system clear the virus.
 - Common side effects: mild irritation, redness, and stinging of the skin
- Salicylic acid
 - SOLUVER 20%, SOLUVER Plus 27%, Compound W liquid or gel 17%
 - Salicylic acid prescription medications should be applied *every night* as follows:
 1. Soak the wart in warm water for at least 5 minutes.
 2. Dry with a clean towel. Since the virus that causes warts can be contagious, be sure no one else uses the same towel.
 3. Gently scrape the surface of the wart with an emery board or a pumice stone.
 4. Apply Vaseline to the normal skin around the wart but NOT to the wart itself.
 5. Apply the prescribed topical medication to the wart.
 - Common side effect: mild irritation. Stop the treatment if skin becomes sore.

- Cryotherapy
 - Apply liquid nitrogen to lesions with a cotton swab or a portable sprayer for 5-10 seconds in 1 or 2 cycles. Treatment may be repeated at intervals of 1-3 weeks.
 - Patients may develop redness, and some irritation where the liquid nitrogen was applied.
 - Occasionally, a blister does develop. If this happens, cover it loosely with a bandage. Avoid bursting the blister to prevent infection. If the blister does pop, an antibiotic ointment can be applied. Ideally, the bumps resolve as the blisters heal.
 - Rarely, scarring or skin discoloration will develop in areas that are frozen with liquid nitrogen. Warts treated around the nails may also result in an abnormal change in the shape of the nail.

Common Complications of Warts and Treatment



Inflamed or red lesions

This may signify that the patient's immune system is recognizing the virus and is starting to clear the viral infection.

Reassure patients/families if there is no sign of soft tissue infection.

However, consider a secondary soft tissue infection if the patient develops

- Fever;
- Increasing pain; or
- Expanding erythema.

Guidelines for Dermatology Referral

- Immunocompromised patients
- Rapidly spreading, extensive, or painful lesions
- Large warts (>1cm)
- Diagnostic uncertainty

** Please specify indication on consultation sheet, as well as age, sex, and treatment prescribed to date.*
 FAX: 514-228-1197

Prepared by Dr. Fatemeh Jafarian and Dr. Jessica Lu

Disclaimer:

The recommendations provided in this document are based on up-to-date evidence and expert opinions. However, the educational material contained herein is NOT a substitute for clinical judgment that is required to meet the different needs of individual patients. For more information, please consult a physician.