

# Warts

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## Overview:

- Warts are caused by a virus called human papillomavirus (HPV) that is present in the skin.
- Warts are contracted by direct contact with the virus; either by touching a wart or by coming in contact with the virus on a surface. Warts are contagious.
- There are over 100 different types of HPV. Testing for the type of HPV is generally only done in women during PAP smears. (Certain types of warts can cause cervical cancer.)
- Since warts spread via direct contact, don't pick at them!
- Children are generally more susceptible to warts than adults.

## Treatment:

- **Wart treatment can be difficult and often requires a fair amount of patience and persistence.** It often takes months to resolve warts. If you discontinue treatment before they are gone, they will often grow to their former size. Warts can recur after treatment.
- **Doing nothing is reasonable**, especially in young children, who generally do not tolerate liquid nitrogen. Warts in children will eventually go away without treatment, but it can take years.
- **Liquid nitrogen** is the most commonly used treatment. It freezes the wart, which in turn stimulates an immune response. Blistering not uncommonly occurs. Liquid nitrogen is generally applied every 2–4 weeks until the wart has resolved. **It generally takes multiple treatments.**
- **Aldara** is a prescription cream that is applied to the lesions nightly for 1–3 months. Aldara is more effective if it is covered with duct tape; this should be removed in the morning. The medication is supplied in packets intended for single use, but if you make a pin hole in the packet with a needle you can get more than one night's use out of a packet. This is important because there are only 12 packets in a box and the medication is expensive (\$170).
- **Hot soaks.** Warts often resolve if exposed to hot water. This takes time and patience, however. You need to soak the affected area (hands or feet only) in hot water (113–120 degrees) for 30 minutes 3 times per week. This takes 3 months.
- **Salicylic acid.** This is the active ingredient in most of the over-the-counter wart treatments. It is well tolerated, so it is a reasonable choice for children. They are supplied as a liquid that dries to form a plastic-like material, or as stick-on pads. These often work, but require patience. Follow the instructions on the package. You can also file the warts down with a nail file between treatments. Soaking the warts before you do this will make this easier. Expect 3 months of treatment.
- **Occlusional therapy** is sometimes effective for warts. This involves covering the lesions with duct tape: 24 hrs a day, 7 days a week recommended, but some will treat just at nighttime. This is a simple, low-cost treatment that is a reasonable choice if only a reasonably small area is involved. This can be combined with liquid nitrogen.
- **Cantharidin** is a liquid medication that is applied to individual lesions. It does not hurt when applied, but it causes blistering several hours later, which can be painful. It is generally used for children.
- **Candida antigen.** In this treatment the warts are injected with a part of a yeast (Candida) that stimulates an immune response, similar to a vaccine. This is a newer therapy; it is generally well tolerated and is becoming more popular.

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