

research study showed that 95% of British schoolchildren who had warts when they were 11 were clear of them by the age of 16. However, if small warts are left untreated they might enlarge or spread.

Cost - chemical-based wart cures can be bought relatively cheaply (currently about £3 to £6). Cryotherapy and other treatments are available on the NHS, but there may be a long wait. Privately, costs vary according to the number of warts and the type of treatment.

Pain - chemical wart applications cause some soreness, but they are not as painful as cryotherapy, which can cause discomfort for a few days after treatment.

Scarring - surgery is the most likely treatment to cause scarring, and creams and liquids the least. Cryotherapy usually causes temporary blistering rather than scarring.

Prevention

- avoid direct contact with another person's wart

- don't share towels with a person who has warts
- don't share shoes or socks with someone who has a verruca
- don't scratch or pick at a wart, this may encourage it to spread
- wear flip-flops in communal showers

Children and swimming

There's no national policy that bans children with a verruca from games and swimming. Many doctors feel it is more important that children learn to swim and enjoy physical activity than it is to prevent verrucas spreading. However, it seems sensible advice that games are not done in bare feet and that verrucas are covered with a plaster. People with hand warts should wear gloves if they are using communal equipment (for example, in a gym).

Further information

British Association of Dermatologists

☎ 020 7383 0266

www.bad.org.uk/patients

Society of Chiropidists and Podiatrists

☎ 020 7234 8620

www.feetforlife.org

This factsheet is based on reputable sources of medical evidence and has been reviewed by BUPA doctors. For more details of references and sources, please see our website. The content is intended for general information only and does not replace the need for personal advice from a qualified health professional.

Warts and verrucas

A wart is a fleshy growth on the skin caused by infection with the human papilloma virus (HPV). Verruca is another name for wart but is usually used to mean the plantar type of warts, found on the soles of the feet.

Treatment for warts can take several weeks or months to be fully effective.

Warts are common

About one in ten people in the UK are thought to have warts at any one time and nearly everyone has at least one wart at some point in their lives.

Warts are most common on the hands and feet but can affect the face and other parts of the body. Children and teenagers are particularly likely to be affected. Although they can be unsightly and embarrassing for people who have them, the common type of wart generally causes no harm.

People taking steroid tablets, or with conditions that suppress the immune system (such as HIV infection) are more likely to develop many warts.

HPV

There are over 70 different subtypes of the human papilloma virus (HPV) responsible for warts. Certain types are more likely to cause warts on different parts of the body.

The virus is spread by direct skin contact or by touching moist surfaces, such as floors in swimming pools and changing rooms, which have been in contact with a person who has warts.

Warts occur more commonly on areas of skin that are likely to be damaged, such as fingers, elbows, knees and the face. Nail-biting in children, shaving in men and ill-fitting shoes in adults have all been blamed for making warts more likely.

Children who have never come into

contact with HPV have no immunity to it and so are more prone to developing warts. Some people seem to be more susceptible to warts than others - so not everyone in the same family necessarily gets them.

Wart types

After coming into contact with HPV, it can take several months for a wart to develop.

Common wart (*verruca vulgaris*) - a firm raised lump with a rough surface that may look like a cauliflower. Often seen singly or in clumps on the knuckles, knees and nail folds.

Plane wart (*verruca plana*) - smooth, flat topped or slightly raised, affecting face or back of hands.

Filiform wart - long, slender growths on lips, eyelids, face or neck.

Plantar wart - affects the soles of feet; commonly called a verruca.

Mosaic wart - this is a collection of small warts grouped together in a cluster.

Genital warts

Certain types of HPV affect the genital area, causing a form of sexually transmissible wart (condylomata acuminata). Don't try and treat these at home, seek advice from your GP or a genitourinary medicine (GUM) clinic. For more information, see the separate BUPA factsheet, *Sexually transmitted infections*.

Treatment

20% of warts disappear without treatment within six months and 65% within two years. Plane warts and mosaic warts are the slowest to clear.

Treatment may be needed:

- if the wart is unsightly
- to prevent spreading (eg people on steroid tablets)
- if it is painful or itchy

Although warts and verrucas are very common, there is not a great deal of scientific evidence to say for sure which treatments work best. For stubborn warts, several different approaches need to be tried.

Non-prescription remedies

A variety of creams, gels, paints and medicated plasters are available from pharmacies. Most of these contain salicylic acid as their active ingredient. Examples include the brands Compound W and Bazuka. Salicylic acid works by destroying the thickened skin which makes up the wart. This can then be rubbed off with an abrasive board or pumice stone.

Other chemicals, including formaldehyde (eg Veracur) and glutaraldehyde (eg Glutarol), have a similar method of action.

Tips for successful treatment:

- salicylic acid and other wart treatments also destroy healthy skin so it is important to protect the

surrounding area - use petroleum jelly or a corn plaster - and apply the product with care

- repeat daily after washing
- rub dead skin off once a week with a pumice stone or emery board
- stop treatment and re-start in a few days if the skin becomes sore
- persevere - there may be little change after two weeks, but 80% of warts are cured in this way within three months

These treatments should not be used by people with diabetes or people with poor circulation, and may not be successful with very large warts

Silver nitrate pencil

This non-prescription treatment also burns away warts. It's applied daily but should be used for just three treatments for a wart, six for a verruca.

Cryotherapy

An over-the-counter freezing system Wartner can now be purchased at a pharmacy. Follow the instructions carefully as the product is not suitable for everyone (including pregnant women and people with diabetes). More aggressive freezing treatment can be given by a doctor - see *Cryotherapy*, below.

When to see a doctor

Seek advice from your GP if home treatments, applied as directed for the appropriate length of time, have not worked.

If there is any doubt about whether the lump is a simple wart, you should not treat it yourself. Seek advice from your GP about any lump or bump that bleeds, is painful, becomes crusty, oozes discharge, looks dark in colour or changes shape or size. Do not treat this kind of lump at home.

Treatments available on prescription:

- Chemicals include formaldehyde, glutaraldehyde, and podophyllin. These are relatively safe and effective, but it's not known whether any treatment is better than any of the others.
- Cryotherapy freezes the wart by spraying (very cold) liquid carbon dioxide or liquid nitrogen on to it. Liquid nitrogen is used to freeze large warts. It's available at hospital skin clinics and some GP surgeries. A sore blister develops, followed by a scab, which falls off a week to ten days later. Larger warts may need several treatments, with three to four weeks space in between.
- Surgery has been used when chemical treatment fails, using a curette (small sharp instrument) to scrape the wart away. Surgery often leaves a scar and there's a danger of spreading the wart virus, so cryotherapy has become more popular.

Issues to consider

Is treatment necessary? - Warts tend to disappear without treatment. One