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# Warts and Verrucas

Warts are usually harmless but may be unsightly. Warts on the feet are called verrucas (or verrucae) and are sometimes painful. Warts and verrucas usually clear in time without treatment. If required, they can often be cleared more quickly with treatment. Most commonly, treatment involves applying salicylic acid or freezing with liquid nitrogen or a cold spray.

### What are warts and verrucas?

- Warts are small rough lumps on the skin. They are caused by a virus (human papillomavirus) which causes a reaction in the skin. Warts can occur anywhere on the body but occur most commonly on hands and feet. They range in size from 1 mm to over 1 cm. Sometimes only one or two warts develop. Sometimes several occur in the same area of skin. The shape and size of warts vary and they are sometimes classed by how they look. Examples are:
  - Common warts.
  - Plane (flat) warts.
  - Filiform (finger-like) warts.
  - Mosaic warts when several warts join together.
- Verrucas are warts on the soles of the feet. They are the same as warts on any other part of the body. However, they may look flatter, as they tend to get trodden in.

Note: anal and genital warts are different. See the separate leaflet called Anogenital Warts for more detail.

# Who gets warts and verrucas and are they harmful?

Most people develop one or more warts at some time in their lives, usually before the age of 20. About 1 in 10 people in the UK have warts at any one time. Almost as many as 1 in 3 children or young people may have warts. They are not usually harmful. Sometimes verrucas are painful if they press on a sensitive part of the foot. Some people find their warts unsightly. Warts at the end of fingers may interfere with fine tasks.

# Are warts contagious?

Yes - however, the risk of passing them on to others is low. When something is called 'contagious', it means it can be passed on by touching. You need close skin-to-skin contact to pass the virus on directly. You are more at risk of being infected if your skin is damaged, or if it is wet and macerated, and in contact with roughened surfaces. For example, in swimming pools and communal washing areas.

You can also spread the wart virus to other areas of your body. For example, warts may spread round the nails, lips and surrounding skin if you bite warts on your fingers, or nearby nails, or if you suck fingers with warts on. If you have a poor immune system you may develop lots of warts which are difficult to clear. (For example, if you have AIDS, if you are on chemotherapy, etc.)

- To reduce the chance of passing on warts to others:
  - · Don't share towels.
  - When swimming, cover any wart or verruca with a waterproof plaster.
  - If you have a verruca, wear flip-flops in communal shower rooms and don't share shoes or socks.
- To reduce the chance of warts spreading to other areas of your body:
  - Don't scratch warts or pick them.
  - Don't bite nails or suck fingers that have warts.
  - If you have a verruca, change your socks or tights daily.

# To treat or not to treat?

There is no need to treat warts if they are not causing you any problems. Half the number of children with warts will find they have disappeared within a year without any treatment. Two thirds will have gone within two years. The chance that a wart will go quickly is greatest in children and young people. Sometimes warts last longer, particularly in adults. In some cases warts may take between 5 and 10 years to clear.

Treatment can often clear warts more quickly. However, many treatments are time-consuming and some can be painful. Parents often want treatment for their children; however, children are often not bothered by warts. In most cases, simply waiting for them to go is usually the best thing to do.

Verrucas are more likely to need treatment because they often make walking painful: the verruca is pressed into the sensitive flesh of your foot when you stand or walk.

On balance it is usually only worth treating a wart or verruca if it is troublesome. For example, if it is painful or you find it ugly and conspicuous.

# What are the treatment options?

The most commonly used treatments are:

- Salicylic acid.
- Freezing treatment.

Each of these is now discussed further.

### Salicylic acid

There are various lotions, paints and special plasters that contain salicylic acid. This acid burns off the top layer of the wart. You can buy salicylic acid at pharmacies, or your doctor may prescribe one. If these don't work, a podiatrist can offer treatment with stronger acid.

Salicylic acid usually comes as a paint or a gel. Read the instructions in the packet on how to use the brand you buy or are prescribed, or ask your pharmacist for advice. Usually:

- You need to apply it each day for up to three months. Persevere if you give up too soon, it will not work.
- Before applying the salicylic acid, rub off the dead tissue from the top of the wart, with an emery file (or similar).
- It is best if you soak the wart in water for 5-10 minutes before applying salicylic acid.
- You should not apply salicylic acid to the face because of the risk of skin irritation which may cause scarring.
- If you have diabetes or poor circulation, you should use salicylic acid only on the advice of a doctor.

If you put the acid on correctly each day you have a reasonable chance of clearing the warts within three months. Studies vary when trying to determine the success rate. However, a review of lots of studies definitely showed evidence that salicylic acid is better than no treatment. It also showed it is the treatment option with the best evidence that it works. Tips for success include:

- Try not to get the acid on the skin next to the wart, as it may become irritated. You can protect the nearby skin by putting some Vaseline® on the normal skin beforehand, or by putting on a plaster with a hole in it which just exposes the wart for treatment.
- If the surrounding skin does become sore, stop the treatment for a few days until it settles. Then re-start treatment. There is
  also a small risk that you may get a skin allergy to the treatment. If this occurs, the surrounding skin becomes red and itchy.
- It may take two weeks or more before you notice any improvement. It can take up to three months of daily applications for warts to go completely.
- Acid lotions and paints are flammable. Keep them away from open fires and flames.

### Freezing treatment (cryotherapy)

Freezing warts may also be effective. Many GPs and practice nurses are skilled at this. You can also get private treatment with cryotherapy from podiatrists. Liquid nitrogen is commonly used. The nitrogen is sprayed on or applied to the wart. Liquid nitrogen is very cold and the freezing and thawing destroys the wart tissue. To clear the wart fully it can need up to 4-6 treatment sessions, sometimes more. Each treatment session is a couple of weeks or so apart.

Freezing treatment can be painful. Sometimes a small blister develops for a day or so on the nearby skin after treatment. Also, there is a slight risk of scarring the nearby skin or nail or damaging underlying tissues such as tendons or nerves. It is not suitable for younger children or for people with poor circulation.

Again, the studies done on freezing treatment vary considerably in their results. Some seem to show it is more effective than salicylic acid; others show it does not have any convincing benefit. It is certainly more expensive than salicylic acid, however. Therefore many NHS services, such as some GP practices, no longer offer it as an option. This is because salicylic acid is cheaper and the evidence that it works is more convincing.

There are freezing treatments available over the counter, which you can apply yourself. However, these cannot provide such a cold freeze as liquid nitrogen. They are probably less effective, although again the results of studies are not totally clear.

### **Combined treatment**

Another option is treatment with salicylic acid plus cryotherapy. In between the freezing sessions, you apply salicylic acid daily to your wart. You should not use the salicylic acid until any blistering, scabs or soreness from the cryotherapy have settled.

### Wart and Verruca Treatment Options

Each treatment option for warts and verrucas has various benefits, risks and consequences. In collaboration with health.org.uk, we've put together a summary decision aid that encourages patients and doctors to discuss and assess what's available.

View the Wart and Verrucas Decision Aid: https://patient.info/health/warts-and-verrucas-leaflet/features/warts-and-verrucca-treatment-options

# Other treatment options

### Verruca needling

Most treatments for verrucas work by destroying the verruca itself with acid or freezing treatment. Verruca needling works by stimulating your own body's immune response to fight off the virus. It involves puncturing the verruca with a small needle to cause bleeding.

Verruca needling is done under local anaesthetic so the procedure doesn't hurt. Most people don't experience much pain afterwards. It is important to avoid anti-inflammatory painkillers for at least 48 hours following treatment, as there is a small chance they can reduce your immune system's ability to fight off the virus.

Verruca needling can be very effective for stubborn verrucas, curing 7 in 10 long-standing verrucas after a single treatment. It is not available on the NHS but can be accessed as a private (paid for) treatment from podiatrists.

### Swift microwave therapy

This is a new treatment developed in the UK which uses precise doses of microwave energy delivered directly through a probe. This allows the energy to be targeted very precisely, heating and destroying the verruca. It only takes a few seconds and does not need local anaesthetic.

It causes minimal tissue inflammation and has a high success rate. In studies, Swift successfully cleared more than 3 out of 4 longlasting, stubborn warts which hadn't responded to previous treatment. You may only need one treatment, but up to 70% of verrucas respond in 1-3 treatments.

This service is not available on the NHS. It is offered as a private (paid for) service by some podiatrists.

### **Specialist treatments**

There are some other treatments used by specialists if other treatments have failed. Treatment is not usually available on the NHS to treat warts and verrucas unless there are complications or they are very severe. It is available as a private (paid for) service from many podiatrists.

Some of the treatments used on warts and verrucas which don't go away are:

- Surgery to cut out the wart or verruca.
- Light therapy (photodynamic therapy).
- · Laser therapy.
- Creams to try to kill the virus (virucidal creams).
- Creams which stop the skin cells multiplying.
- Certain creams which are normally used for skin cancers.

#### Tape

One study several years ago seemed to show that covering warts with duct tape gave a good chance of cure. However, studies since have found that this is not the case. The British Association of Dermatologists do not recommend it because they do not believe there is enough evidence that it works.

The method described was:

- The wart was covered with duct tape for six days. If the tape fell off during this time, a fresh piece of tape was put on.
- After six days, the tape was removed and the wart soaked in warm water for five minutes. After drying, it was then gently rubbed with an emery board or pumice stone to get rid of dead tissue from the top of the wart.
- The wart was then left uncovered overnight and duct tape put on again the next day.
- Treatment was continued for up to two months.

There have been no concerns about harm using this method. Some experts advise that you should not use duct tape on the face, as in some people it can irritate the skin.

# What about swimming?

A child with warts or verrucas should go swimming as normal. Swimming is a vital skill, which can save your life. Warts can be covered with waterproof plasters. A verruca can also be covered with a waterproof plaster. Some people prefer to wear a special sock which you can buy from pharmacies. However, this makes it very obvious that you have a verruca, may be embarrassing and has not been proved to make a difference. British swimming organisations do not advise wearing the waterproof sock. The plaster should be enough. It is also a good idea to wear flip-flops when using communal showers, as this may reduce the chance of catching or passing on virus particles from verrucas.

# Further reading & references

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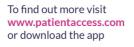
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