

Verrucae

What are verrucae?

Verrucae are warts that can be found anywhere on the feet but most often on the soles of the feet.

What causes verrucae?

Verrucae are caused by an infection in the outer layers of the skin with a virus called the Human Papilloma Virus (HPV). There are many different strains of the virus and verrucae are usually due to just a few of these. The virus is everywhere in the environment, even on our skin. If the virus is able to penetrate the outer layers of skin through tiny breaks in the surface, it can infect the living cells in the deeper layers of the skin. The virus is transmitted by direct contact but some people seem to be more susceptible than others and verrucae tend to be more common in children.

To minimise your chances of becoming infected, wash your hands after touching a wart or verruca and avoid walking barefoot in public places. If you have a verruca, change your socks daily and cover it with a plaster when swimming.

It is difficult to identify where/when the virus was picked up as it can take several weeks, if not months, before symptoms appear.

Appearance

Verrucae have a cauliflower-like appearance and sometimes contain small black dots which are caused by blood leaking into the verruca tissue from tiny vessels in the deeper layers of skin. Some verrucae form a cluster giving a mosaic-like appearance.

Symptoms

In most cases verrucae cause no symptoms. Some verrucae can be uncomfortable, particularly if they are present on a weight-bearing area. Hard skin can also form over the verruca, increasing the discomfort. 'Mosaic' verrucae are usually painless.

Verrucae can sometimes be difficult to differentiate from corns. Verrucae tend to be painful when pinched whereas corns tend to be painful when pressed.

What treatments are available?

Being a viral infection, only the body's own immune system can get rid of verrucae. In many cases the verrucae will disappear within 2 years, particularly in children. Therefore, if your verruca is painless, no treatment is required and this is the safest course of action.

The virus is very good at disguising itself from the immune system and, combined with a reduced immune function in the outer layers of skin, verrucae can sometimes persist for long periods of time. In the case of stubborn verrucae, or if they are spreading or are unsightly, treatments are based on reducing pain and trying to stimulate the body's immune system to recognise and destroy the virus.

Self-treatments with over-the-counter products

- Salicylic acid is the active ingredient in most over-the-counter gels, creams, paints and plasters.
- A very cold spray is also available which you can apply yourself.
- Taping with zinc oxide tape reduces water loss from the skin which softens the skin making the verruca more comfortable. The verruca should be covered with tape for six days, and if the tape

Bournemouth Podiatry

falls off, it should be replaced with a fresh piece. Then remove the tape and leave the verruca uncovered overnight. The following morning file the verruca with an emery board to remove any dead skin cells and reapply the zinc oxide tape. This can be continued for up to two months. There is conflicting evidence regarding the effectiveness of taping in the treatment of verrucae. It might still be worth trying, especially in children where the use of acids and cryotherapy may be inappropriate, or in cases of painful verrucae. (You may have heard of the use of duct tape. The adhesive in duct tape is tested for industrial use and it is not dermatologically tested!)

NOTE - do not self-treat if you have diabetes or circulatory problems.

Treatments available at Bournemouth Podiatry

- Removal of the hard skin overlying a verruca to reduce discomfort.
- Salicylic acid is used to soften the hard skin and cause minor local trauma to stimulate an immune response. This is more concentrated than that available over-the-counter.
- Verrutop is a topical application of a Nitri-zinc complex which kills the wart by breaking down its protein structure, leaving intact skin beneath. It is not a caustic and is painless, although some patients may experience some tingling. A course of at least three treatments and up to 6 may be required. Patients are required to apply surgical spirit twice daily to the verruca to aid the desiccation process. Verrutop is suitable for adults and children over 6 years.
- Cryotherapy involves applying nitrous oxide directly to the verrucae causing the cells to burst and exposing the virus to the immune system. Cryotherapy can be painful and may result in blisters forming and, as such, may be unsuitable for young children.
- Needling is a treatment that is carried out under local anaesthetic. A needle is used to puncture the verruca several times. This breaks up the cells and drives the virus into the deeper layers of skin to expose it to the immune system. Please ask for further information if required.

Other treatments available

- Laser therapy is a painless, safe treatment with few side effects.
- SWIFT uses microwave energy delivered directly to the site of the verruca using a probe applied to the skin. It targets water molecules in the skin creating heat. It can be painful but the pulses only last a few seconds. A course of 3-4 treatments is needed.

Be wary of

- Herbal or 'natural' remedies. There is a misconception that because something is natural it is beneficial or not harmful. There are many harmful and toxic substances in nature! There is no research evidence that herbal remedies work and there may be possible adverse effects.
- Immune boosting therapies. The immune system is not usually the problem.

A final important note

Due to the viral nature of verrucae, treatment success cannot be guaranteed. Patients should consider the cost of treatment, often involving several sessions, versus the benefits to them, given that verrucae often resolve in time without treatment.