

# Verrucae Treatments at Betafeet Podiatry Explained

## What are verrucae?

Verrucae (warts) are caused by the Human Papilloma Virus (HPV). The virus invades the outermost layer of the skin (epidermis) and causes visible lesions to appear on the skin. A verruca usually appears as a plaque of hard skin, with an irregular border and can have black dots (blood vessels) scattered throughout. They can be on the feet. It is important to remember that the virus is contagious and can be spread.

Our immune system is far more active in the deeper layers of our skin (dermis), which explains why some verrucae are so resilient.

Verrucae generally disappear of their own accord within two years as the immune system recognizes the virus. It is therefore not recommended to treat them unless they are painful. However, for verrucae that are spreading or cause pain, treatment options should be discussed.

## What are the treatment options?

- Cryotherapy (Freezing)
- Salicylic Acid
- Falknor's Needling (requires surgery consent)

## Cryotherapy

Cryotherapy is the use of Nitrous Oxide to freeze the tissue containing the verrucae virus. It generally requires few treatments and is the least time-consuming. Cryotherapy also aims to cause an immune response action against the verruca(e). The verruca(e) will be frozen using a spray method or probe placed onto the infected tissue. The application will usually take the form of three times 20/30-second applications and can be uncomfortable. The tissue is left to thaw out which take approximately 1 minute and then a second application of freezing is applied.

## What are the side effects of the treatment?

- Pain
- Swelling and redness
- Blistering
- Infection
- Scarring
- Skin colour changes
- Numbness

## Salicylic Acid

Salicylic Acid is a chemical that breaks down the skin. When applied directly onto the verruca(e) it creates a macerated white appearance allowing the infected skin cells to easily be removed. Treatment can be time consuming with visits every 7-14 days. The foot should also be kept dry for at least the first 48 hours to allow the chemical to work sufficiently. Some padding will be applied around the verruca(e) to prevent the chemical from spreading into the healthy tissue and a small amount of paste will be put onto the verruca(e). This should be painless.

### What are the side effects of the treatment?

- Pain
- Redness
- Swelling
- Dermatitis

## Falknor's Needling

Needling is a minor surgical procedure to treat verruca(e) under local anaesthesia. The goal is to implant infected cells into the dermis thus stimulating an immune response and therefore destruction of the virus. Recent studies have shown Falknor's Needling has a success rate of approximately 69 percent.

Needling involves the use of a fine dental needle to puncture the verruca lesion and dermo epidermal junction multiple times under local anaesthesia. The goal is to implant infected cells into the dermis thus stimulating an immune response and therefore destruction of the virus.

One huge advantage over other treatments such as cryosurgery and acids is that only one session of treatment is usually needed. If you have multiple lesions then still only the "mother lesion" needs to be treated as a systemic immune response is initiated. There is no evidence that suggests using this technique can spread the virus further.

### What are the side effects of the treatment?

- Swelling
- Allergic reaction to anaesthesia
- Infection
- Pain
- Unsuccessful remove of the verruca(e)

## Consent for verruca(e) treatment

Because Falknor's Needling treatment involves the use of anaesthesia, the patient will be required to sign a surgery consent form.

The other less-invasive verruca(s) treatment methods will also require the signing of a (non-surgical) consent form.