

# TREATMENT OF YOUR PLANTAR WARTS (VERRUCA)



## What are warts?

Warts are a common viral infection of the skin caused by human papillomavirus (HPV).

Warts may vary in size (from 1 mm to 1 cm) and appearance but are flat when they occur on our feet. They are usually located on the front of the sole of the foot and on the heel. A closer examination of a plantar wart typically reveals small black dots in the wart. Though they are called seed warts, they are actually small blood vessels that have clotted due to the pressure of walking or standing on them.

Warts occur either as single warts or in clusters where several warts fuse. These clusters are called mosaic warts.

If left untreated, warts can disappear by themselves within a few years. But they may give you discomfort, and particularly warts underneath your feet can become sore when standing on them, which is why treatment is preferred.



## What is cryosurgery?

An efficient therapy for removing plantar warts is to destroy the infected layer of skin by freezing. This method is also known as cryosurgery and has been used for treatment of skin lesions for about 100 years.

Cryo is the Greek word for "cold", and surgery is derived from the Greek word kheirourgia meaning "working by hand".

Freezing the infected layer of skin without damaging the healthy skin below is possible because the top layer of skin is much more sensitive to changes in temperature than the deeper layers of skin.

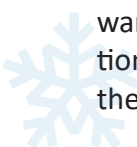
## Treatment with cryosurgery

Hydrozid® is an efficient cryosurgical treatment for plantar warts, among other uses.

Hydrozid® contains the gas norflurane. When briefly sprayed on the wart, it generates a temperature of about -50°C, which destroys the virus-infected skin.

Some warts may be particularly resistant to treatment, and even cryosurgery may require repeated treatment. In these cases, you are recommended to receive treatment again after 1-2 weeks.

In certain instances, cryosurgery may cause skin pigment changes, though this is rare for treatment of plantar warts. This means that in fair skin, a lightening of the skin in the treated area may appear (hypopigmentation), while in dark skin a darkening of the skin in the treated area may appear (hyperpigmentation) after the completion of treatment. This change is often temporary but may be permanent in some cases.



## Before treatment

To ensure the best possible result of treatment, the therapist will scrape off the top layer of skin on the wart before treatment.

The thickened skin over the wart insulates body heat, thus reducing the effect of the low temperatures of cryosurgery, which is why the top layer of the wart may in some cases be removed before the treatment.

## During treatment

There is no need for anaesthesia during treatment.

Hydrozid® will be sprayed directly on the wart for up to 6 seconds. The frozen area will be visible as a snow-white section. When the wart is no longer white, the area that was frozen will have thawed, and the treatment can be repeated. The recommended treatment is 6 times of 6 seconds each, corresponding to a total treatment time of 36 seconds. The therapist will assess your individual treatment needs along the way.

If you receive treatment for more than one wart, they will be treated at the same time as the frozen areas of the other warts thaw.

Cryosurgery may cause a slight stinging or burning sensation while the wart is being frozen. This sensation will subside when treatment stops.

## After treatment

The treated area may be red, tender and swollen immediately after treatment.

It is recommended to keep the treated area clean and dry.

You may experience itching as part of the healing process. To reduce the risk of infection, you should not scratch or pick the treated area.

You may also experience blisters later. To reduce the risk of infection, you should not pop the blisters. If the blister pops anyway, clean the area with mild, unperfumed soap daily and protect it with a plaster, if necessary.

## Avoid infecting others

Wart virus is very contagious. Skin cells on the wart release thousands of cells with virus every day, enabling infection by direct contact with others or through objects. It is also common to infect yourself by transferring wart virus to other places on your body.

The period from your exposure to infection until you see the formation of a wart may be several months. This makes it almost impossible to know the source of the infection.

To avoid infection, you should use caution in communal showers, such as at public pools or fitness centres. This is because wet skin is more susceptible to infection left by a disease carrier's wart on the floor. You are particularly susceptible to infection if you have small cracks or fissures on the soles of your feet.

- Therefore, avoid walking on wet floors without sandals or other protection. You can use swimming pools, spas, etc., without restrictions as wart infection does not transmit through chlorinated water.
- Keep your feet dry in socks and shoes.
- Do not share your towel, razor, nail clipper or other objects that may have been in touch with a wart.
- Do not touch your own warts or anyone else's, as cells with virus, etc., may remain stuck under your nails and be carried elsewhere.