



Treating warts and verrucas with Hydrozid®

People often ask: “How many wart treatments do you get from Hydrozid®?”

You might think the answer would be evident, but it depends on a number of factors such as:

- the pressure you apply to the trigger on the canister
- the duration of treatment
- the size of the treated area (an individual wart or mosaic warts)

Wart treatment can often be a long-term process, and most patients require multiple treatments.

TREATMENT TEMPERATURES

Hydrozid® offers simple, safe and effective cryosurgical treatment with norflurane gas.

According to the literature, the necessary temperature for destroying benign cells using cryosurgery is between -20°C and -30°C , while for premalignant cells it is between -40°C and -50°C (Andrews, 2004 & Nasr, 2020).

With its concentrated jet, Hydrozid® creates a consistent treatment temperature of -54°C to -58°C on the actual wart (Sørensen, 2018; Ollershaw, 2020, 2022), thus providing ideal treatment of all approved skin lesions.

The accompanying application templates help protect surrounding healthy tissue during treatment, thus preventing damage to the patient’s healthy skin and mucous membranes.

Cryosurgical treatment is **most efficient** when combined with concurrent curettage treatment to remove the top layer of the wart. The top layer may function as insulating protection of the wart and may contribute to reducing the effect of treatment. The therapist assesses the lesion and the need for curettage in the individual patient.

NUMBER OF TREATMENTS PER CANISTER

The number of treatments is based on an independent test carried out by the Danish Technological Institute (Nielsen & Vendelbo, 2022):

Out of 8 test subjects,* the two most experienced users averaged 2,147 (1,861-2,433) seconds of treatment (Nielsen & Vendelbo, 2022).

This means that experienced users will get 60 (52-68) treatments from Hydrozid®.

We choose the term *"experienced users"*, as correct use will significantly increase the number of treatments. Mastering the treatment technique may require some training. As the old saying goes: *"Practice makes perfect"*.

The recommended treatment time is 6 seconds of freezing, followed by a pause of 10-30 seconds during which the ice crystals thaw entirely. After this, the treatment is repeated to treat the patient for a total of 6x6 seconds (36 seconds) per wart.

However, warts may be resistant to treatment and the therapist should assess the patient and the wart to identify the suitable freezing time and the number of freeze-thaw cycles. Side effects, if any, may be more frequent and more intense if the treatment exceeds the recommended period.

The consistent treatment temperature of Hydrozid® reduces the risk of side effects in the patient when correctly used. The low risk of side effects allows for more frequent treatment of patients, which reduces the total treatment duration.

* The test result is based on a representative selection of experienced as well as inexperienced users of Hydrozid®.



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HYDROZID® IS READY FOR USE AFTER UNPACKING. DO NOT REMOVE THE TIP OF THE APPLICATION TUBE. IT MUST REMAIN IN PLACE DURING TREATMENT TO ENSURE A CONCENTRATED TREATMENT JET AND PREVENT DRIPPING.

References

- Andrews, M. D. (2004). Cryosurgery for Common Skin Conditions. AMERICAN FAMILY PHYSICIAN. Volume 69, number 10 / May 15, 2004, pp. 2365-2372.
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- Muhaidat et al (2020). Research Article. Comparison of the Efficacy and Safety of Two Cryotherapy Protocols in the Treatment of Common Viral Warts: A Prospective Observational Study. Hindawi Dermatology Research and Practice Volume 2020, Article ID 2309309, 5 pages.
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- Nielsen, J. M. & Vendelbo S. B. (2022). Report on Samples, Hydrozid [Force]; DTI; 2022 Testrapport.
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