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LIQUID NITROGEN TREATMENT (OR FREEZING/BURNING)

Liquid Nitrogen is liquid air, boils at 77 K (–196 °C/–321 °F), and is a cryogenic fluid which can cause rapid frostbite on contact with living tissue.

In dermatology, Liquid Nitrogen is used for the destruction of many lesions on the skin by creating a blister and separating the growths from the deeper portion of the skin, cutting off its blood supply; as the skin/blister heals, the unwanted lesion/growth goes along with it. This is why it sometimes takes more than one treatment before the entire growth is destroyed.

Liquid Nitrogen is a common treatment for:

- Actinic Keratoses – pre-cancerous lesions
- Verrucae Vulgares – common warts
- Molluscum Contagiosum – tiny umbilicated warts that spread easily between children

Liquid Nitrogen also is common treatment for benign lesions; ones we do not like the look or feel of:

- Seborrhic Keratoses – benign warty growths
- Skin tags – fleshy moles

What does a cryotherapy treatment involve?

We apply liquid nitrogen directly to the lesion using a Q-tip cotton swab that has been dipped into the liquid nitrogen. A blister will/may form over the area anywhere from 2 to 24 hours after the treatment, and you may notice some redness and swelling. The blister may be painful or itchy. There may be some blood in the blister fluid – you shouldn't be alarmed by this. You may lance the blister, at its base with a needle that has been sterilized over an open flame. After puncturing the blister, gently press the fluid out, apply Vaseline or Polysporin and cover with a bandage.

The blistered area will flatten, crust over and eventually fall off, taking the unwanted lesion with it. It should be completely healed in 7-14 days. You may notice some temporary loss of pigmentation, but there is usually no permanent scarring.

If the entire lesion is not destroyed, it will grow back. That's why it's very important that you continue with follow-up appointments once we've done the treatment. Facial and neck lesions will clear in 1-2 treatments. We may re-treat it, depending on the size and location of the lesion. On average, hand warts may take up to 2-3 treatments to clear, plantar warts 3-4 treatments. Some patients have very resistant warts that can take months to clear.

Does it hurt?

After the liquid nitrogen is applied, you may feel a stinging, burning sensation, which peaks during thawing, about two minutes after the treatment is over. Once the blister forms over the lesion, it may be painful or itchy.

What other treatments are used?

Liquid nitrogen can be combined with other products or the products may be used alone. Your provider will decide which options are best for you. Salicylic acid can be applied to help peel off the outer layers of skin in which a wart virus is residing. Cantharadin is a solution that can only be applied by a medical doctor. It causes a blister to form under the lesion, lifting it off. Aldara® and Solaraze® are topical prescriptions that are sometimes used with for viral warts and for precancers and actual skin cancers.