



What is Cryotherapy?

Cryotherapy ("freezing") is a minimally invasive treatment that freezes the skin surface using extremely cold liquid such as liquid nitrogen (temperature -196°C). Liquid nitrogen ("freezing") is used to treat a range of skin lesions (such as skin tags, solar or actinic keratoses ("sunspots"), warts). It rapidly freezes the skin, producing a superficial destruction of the skin lesion.

Expected side effects:

Immediate effects: redness, swelling, pain, itch/altered sensation, blistering, occasional headache if treated on forehead and scalp.

Delayed side effects: scab formation, hypopigmentation (the area may appear lighter to the surrounding skin

Potential complications:

Ulceration of the treated area, local nerve damage (usually temporary), permanent scar (the treated area may be darker or lighter than the surrounding skin, or be indented or a raised scar), loss of hair if treated area on the brow or scalp.

Wound infection – can present as increased pain, swelling, thick yellow blister fluid, purulent discharge and/or redness around the treated area. Advise Dr Sandy if you have any concerns as it may require treatment with topical antiseptic or antibiotics.

Persistent or recurrent skin lesions, necessitating further treatment or biopsy.

Aftercare for Cryotherapy/liquid nitrogen treatment

Day 1 after freezing

The treated area becomes red and swollen. It might sting or feel itchy. A blister may develop, and occasionally fills with blood. It is best to leave blisters alone, but if a blister is uncomfortable, you can lance it with a sterile needle to deflate the blister. A dressing is optional but is advisable if the treated area is subject to trauma or clothing rubbing it. Immediate swelling and redness can be reduced by taking oral aspirin (as long as you have no contraindications to taking this medication).

Avoid sun exposure on the treated area. Apply a soothing ointment such as Vaseline, Stratamed Silicone gel, or Cicaplast.

Days 2 and 3 after freezing

The treated area becomes weepy. If weeping is mild, leave the skin open to the air – you can safely wash the area with mild soap and water and gently pat dry. If weeping is excessive, cover the area with a dressing.

Days 3 to 4 after freezing

The treated area with form a scab. The scab stays for 1 - 2 weeks.

Allow the treated area to heal underneath the scab and avoid picking. Apply ointment such as Vaseline or a lip balm several times a day.

The scab usually peels off after 5-10 days on the face, 2-3 weeks on the hand or forearm, and occasionally longer on the lower leg because healing in this site is often slow. Healing generally takes 1-2 weeks, but residual redness may persist for several weeks.

The area may require repeat treatment at 3-4 weeks





Notify Dr Sandy if any adverse reactions occur such as: excessive blistering, signs of infection (red/hot/worsening tenderness/pus)

IF YOU TREATED LESION DOES NOT COMPLETELY DISAPPEAR, OR RECURS (GROWS BACK) IT SHOULD BE REVIEWED BY YOUR DOCTOR AND BIOPSIED IF SUSPICIOUS

How can I protect my skin?

Protecting your skin from the sun will help reduce the number of new actinic keratoses you get and will reduce the risk of developing a sun-induced skin cancer. You should be extra cautious in the sun by following these recommendations:

Protect yourself from the sun between 9am to 3pm when the sun is at its strongest.

Wear protective clothing – hats, long sleeves, long skirts or trousers.

Apply a sunscreen that blocks both UVA and UVB light and with a sun protection factor of 30 or above regularly to exposed skin before going into the sun. Re-apply the sun cream according to the manufacturer's recommendations, especially if sweating or after swimming, when you are out in the sun.

Protecting your children from the sun in the same way may reduce their risk of developing actinic keratoses and skin cancers in the future.

Avoid artificial sunlamps, including sunbeds and UV tanning cabinets.

Be skin aware – examine your own skin every few months and see your doctor if you notice something new that appears abnormal. If an actinic keratosis starts to develop into a lump or starts to bleed, then visit your GP. These symptoms can indicate that it has changed into a skin cancer. Early treatment is usually curative.

People who actively avoid sun exposure should have their vitamin D levels checked and monitored. You may be advised to take a vitamin D supplement by your GP

Vitamin D advice

There has been some promising evidence that Vitamin D supplementation can reduce risk of skin cancer. Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

VITAMIN B3

Niacinamide or Nicotinamide or Vitamin B3 is an oral supplement that can help reduce actinic keratoses (sunspots) and non-melanoma skin cancers such as Squamous Cell Carcinoma over time.

Dose: recommend 500mg twice daily for 1-2 years or longer if indicated

Vitamin B3 is a safe and well tolerated supplement, but there have been uncommon reports of side effects such as increased sweating, lower blood pressure and increased blood sugar levels.



