

## **What is Cryotherapy?**

The term 'cryotherapy' literally means 'treatment using low temperature', and refers to the removal of skin lesions by freezing. The most common agent used by doctors is liquid nitrogen. An aerosol containing a mixture of dimethyl ether and propane is available over-the-counter at chemists shops for use at home.

## **What is liquid nitrogen?**

Liquid nitrogen is the liquid state of gaseous nitrogen, which occupies 78% of the air we breathe. Liquid nitrogen is extremely cold, boiling at minus 196°C. It is necessary to store and transport it in special flasks.

## **What does the procedure involve?**

Cryotherapy may be carried out at your GP surgery or during a routine outpatient consultation with your dermatologist or plastic surgeon at the hospital. There is no need for any special preparation before cryotherapy. Liquid nitrogen is usually applied to the skin using a spray gun.

## **What are the side effects of liquid nitrogen treatment?**

### **Pain**

Cryotherapy is usually well tolerated but can sometimes be painful if a deep freeze has been necessary. This

discomfort can occur at the time of the treatment and for a variable time afterwards. Simple painkillers (such as Paracetamol) taken for the first 24 hours may relieve that discomfort. If you are aware of forthcoming treatment painkillers can be taken in advance.

### **Blistering**

The treated area is likely to become inflamed within a few hours and may blister (a wound). Sometimes the blister is clear and sometimes it is red or purple because of bleeding (this is normal). Within a few days a scab will form and the blister gradually dries up. Blisters should not generally be punctured, if necessary this should be done by a nurse or doctor using a sterile needle.

### **Swelling**

Treatment near the eye may result in a puffy eyelid, especially the following morning, but the swelling settles within a few days

### **Scarring/Pigmentation**

Sometimes cryotherapy may result in a scar, particularly when freezing has been prolonged, as is sometimes required for a cancerous lesion such as a basal cell carcinoma. The skin at the treatment site may lighten to a white mark (hypo pigmentation) or darken in colour

especially in dark-skinned people. This usually improves with time, but can be permanent.

### **Numbness**

If a superficial nerve is frozen, it may result in numbness of the area of skin supplied by that nerve. Normal feeling usually returns within a matter of months.

## **How to look after the wound following cryotherapy**

Usually no special attention is needed during the healing phase. The treated area may be gently washed once or twice daily, and should be kept clean. A dressing is optional, but is advisable if the affected area is subject to trauma or your clothes rub on it.

When the blister dries to a scab, apply Vaseline or Savlon Cream twice daily and avoid picking at it. The scab usually peels off after 5-10 days on the face and up to 3 weeks on the hand. A sore or scab may persist as long as 3 months on the lower leg because healing in this site is often slow. Afterwards the skin may appear entirely normal without any scarring.

**If the treatment is not effective or the condition recurs you should contact your doctor for review.**

## Taking Care in the Sun

☀ Stay in the shade between the hours of 11am and 3pm.

☀ Make sure you never burn.

☀ Avoid the use of sun beds.

☀ Always cover up. Wear light cool clothing of a tight weave, wide-brimmed hats and U.V. protective sunglasses, look for the CE or BS EN 1836:1997 mark these offer the highest protection. .

☀ Take extra care of children as their skin is delicate. Very young babies should be kept out of strong direct sunshine.

☀ Use a sunscreen of factor 30 and above, according to your skin type, ensure the sunscreen has UVB and UVA protection. Look for the star rating \*\*\*\* or \*\*\*\*\* on the label. The price is not important. Apply it 15-30 minutes before you go out and re-apply regularly every 2-3 hours

### Remember:

**Pass on the message to family and friends about protecting themselves from the sun and being aware of changes to moles on their skin.**

## Telephone numbers for follow up appointments:

Dermatology and Plastic Surgery

01752 439936

## Other sources of information:

[www.bad.org.uk](http://www.bad.org.uk)

[www.nhschoices.uk](http://www.nhschoices.uk)

[www.sunsmart.org.uk](http://www.sunsmart.org.uk)

[www.metoffice.gov.uk](http://www.metoffice.gov.uk)

[ruth.devlin@nhs.net](mailto:ruth.devlin@nhs.net)  
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## Patient information

# Cryotherapy Treatment

To obtain further advice and information please contact

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