

This leaflet provides information for patients considering cryotherapy treatment to an area of the skin. The leaflet goes through what the procedure involves, the potential risks and long-term consequences.

Cryotherapy is the treatment of skin irregularities by freezing them with cold liquid nitrogen spray at temperatures of -196°C. Liquid nitrogen is stored and transported in special flasks or containers. The cold spray is applied to the skin for a few seconds at a time. Depending on the nature of the abnormality, more than one treatment may be necessary with treatments being repeated every 4 to 6 weeks.

A wide variety of benign, non-cancerous skin abnormalities can be treated with cryotherapy, but it is most commonly used to treat areas of sun damage, viral warts and flat, pigmented areas that show no sinister changes.

How is cryotherapy performed?

The skin abnormality is sprayed with the liquid nitrogen and the procedure itself lasts only a few seconds. The treated skin appears white immediately after treatment and within a few minutes, the skin returns to normal colour or appears slightly red. The treatment can be performed in the clinic and although there is slight local pain felt when the cryotherapy is performed, local anaesthetic is not required to the area prior to treatment.

Usually, the treated area will look normal, although bruising, swelling and redness may be visible for a few days. Occasionally, the treated area may become raw, a scab may form after a few days and heal in 1 to 2 weeks.

It will take at least 4 weeks before you are able to determine how effective the cryotherapy treatment has been. Depending on the nature of the abnormality, more than one treatment may be necessary, and the treatment can be repeated every 4 to 6 weeks.

Where is cryotherapy treatment performed?

If the equipment is available and you wish to proceed, any skin abnormalities suitable for cryotherapy can usually be treated in the clinic, following your consultation with Miss Tadiparthi. After treatment, you should be able to return to work and normal activity straight afterwards

What are the risks of cryotherapy treatment?

Regardless of how minor a treatment is, there is a potential for complications. It is important that you understand these risks before proceeding with treatment. The main risks of cryotherapy treatment include:

Redness, swelling, bruising, pain and altered sensation

The treated area may be red, swollen, inflamed and painful after treatment. These symptoms usually settle in a few days.

Blistering

Rarely, the treated area may blister and become raw and ooze fluid. A scab will form in a few days and the area should heal with dressings in 1 to 3 weeks.

Infection

Infection is uncommon and usually occurs when the area blisters.

Permanent scarring and pigmentary changes

A permanent scar following blistering may sometimes be seen. There may be pigmentary changes with either lightening (hypopigmentation) or darkening (hyperpigmentation) of the treated skin. Any additional treatment for pigmentary changes will be at extra cost to the patient.

Poor scarring

The quality of the scarring varies with each individual's own healing ability. Scarring following any blistering usually heals well but some patients are especially prone to poor scarring. The scars may be red, painful, lumpy and itchy which is called, 'hypertrophic' or 'keloid' scarring. Further treatment may be needed with regular steroid injections or silicone dressings if hypertrophic or keloid scarring develops. Any additional treatment for poor scarring will be at extra cost to the patient.

Recurrence

Although an area may respond well to cryotherapy treatment, it may recur later on and further treatment may be needed.

Need for further treatments

There may be some slight improvement in the appearance of the area after treatment but the skin abnormality may not fully resolve. A period of 4 weeks should be given to determine the response following a cryotherapy session. Further treatments may be needed every 4 to 6 weeks.

Poor response

The treated area may not respond to cryotherapy and there is no guarantee how well it will respond to treatment. Other types of treatments with either surgery or laser can be explored if cryotherapy is not having any effect.

Sensitivity to sun

The treated area will be sensitive to sun and therefore either covering up the treated area or use of sun cream (SPF 30+) over the area is advised. Sun exposure can lead the treated area becoming darker in colour (i.e. hyperpigmented).

What is the post-operative care following treatment?

- You will be allowed home shortly after the treatment.
- It should be possible for you to return to work the same day.
- The area should be kept clean and dry. Make up should be avoided for a few days.
- It should be possible for you to go swimming and exercise as usual after the treatment. However, if the treated area blisters and becomes raw (i.e. ulcerated), it is best to avoid swimming until the area heals fully to minimise the risk of wound getting inflamed or infected.
- The treated area is sensitive to sunlight and can become darker and more pigmented if exposed to sunlight and the area can get sunburn. Therefore, once the area has healed (usually by 2 to 3 weeks) and there are no longer any dressings, the area should either be covered up with clothing or sun protection cream (SPF 30 or more) should be applied when the area is exposed to the sun.

What follow up appointments will I have?

You will be seen in the clinic by Miss Tadiparthi at 6 to 8 weeks after the treatment to see if any further cryotherapy treatment is required.

Where can I get further information?

British Association of Dermatologists information on cryotherapy

http://www.bad.org.uk/for-the-public/patient-information-leaflets/cryotherapy/?showmore=1&returnlink=http%3a%2f%2fwww.bad.org.uk%2ffor-the-public%2fpatient-information-leaflets%3fl%3d0%26q%3dcryotherapy%26range%3dcryotherapy#.XkOJTmj7Q2w