

## **Cryotherapy**

Cryotherapy refers to a treatment in which surface skin lesions are frozen using liquid nitrogen. It is a safe treatment for many different types of lesions such as actinic keratoses, viral warts, seborrheic keratoses and early superficial skin cancers. However, the skin lesion must be properly diagnosed and dependent on the type of lesion. Cryotherapy may not always be successful so careful follow-up is necessary.

### **Treatment**

Cryotherapy using liquid nitrogen (temperature -196C) involves the use of a cryospray. The nitrogen is applied to the skin lesion for a few seconds, depending on the desired diameter and depth of freeze. The treatment is repeated once thawing has completed. This is known as a 'double freeze-thaw'. Cryotherapy stings during the treatment and for a short time post treatment for a variable period afterwards.

### **Post-treatment**

The treated area may have swelling and redness immediately especially near the eye but the swelling will decrease within a few days. It may also blister within a few hours of treatment. Sometimes the blister is clear, red or purple because of bleeding (this is harmless) especially the following morning. Within a few days, a scab forms and the blister gradually dries up.

The treatment area should be kept clean and may be gently washed once or twice daily with antibacterial soap. A dressing is optional, but is advisable if the treatment area will be rubbed by clothes or has the potential for trauma such as on hands.

When the blister dries to a scab, apply petroleum jelly (Vaseline) and avoid picking at it. The scab peels off after 5-10 days on the face and 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, Secondary infection is uncommon. When it occurs it may cause increased pain, swelling, thick yellow blister fluid, a purulent discharge and/or redness around the treated area. Consult your doctor if you are concerned. Topical antiseptics and/or oral antibiotics may be necessary.

### **Post Healing**

After a standard freeze of actinic keratosis, seborrheic keratosis or viral wart, the skin may appear entirely normal without any sign of the original skin lesion. However, cryotherapy may result in a white mark (hypopigmentation) or a scar, particularly when freezing has been deep or prolonged, as is required for a cancerous lesion. A white mark may sometimes follow a light freeze. The white mark may be quite noticeable especially in those with darker complexions. Although the appearance often improves with time, the color change can be permanent.

### **Follow Up**

Skin lesions may fail to clear or may recur at a later date, necessitating further cryotherapy, surgery or other treatment. If you have any question, please call and speak to your provider and schedule a reevaluation.