

Freezing with Liquid Nitrogen

Freezing with liquid nitrogen (formally known as *cryosurgery*) is the most common treatment method we use in dermatology. It's performed by applying liquid nitrogen with either a spray bottle or cotton-soaked applicator. It works by essentially "frostbiting" the treatment site which then peels away days to weeks later. Liquid nitrogen is able to do this because it is *so cold* (-321 °F). A variety of lesions can be treated with cryosurgery - including *actinic keratoses* ("precancers"), *warts*, and wart-like growths called *seborrheic keratoses*.

The primary advantages of cryosurgery are that it can treat lesions faster, at less cost, and at less risk than traditional surgery (cutting).

It has a few disadvantages, though:

- 1) The application of liquid nitrogen does sting. Although it's cold, many describe the procedure as feeling as if it's "burning".
- 2) Cryosurgery can cause treatment sites to appear permanently lighter in color. Extra caution must be used when treating the face or any other cosmetically-sensitive area.
- 3) It's only appropriate for "surface" lesions. In other words, it's generally not effective for the treatment of fully-developed skin cancers or "deep" lesions such as large moles.
- 4) Depending on how it is applied and the location of the treatment site, blisters will sometimes form in the days following treatment (more common on the fingers).

WOUND CARE

Because cryosurgery doesn't "break the skin", wound care is generally very straightforward. You can expect the treatment sites to appear slightly red/inflamed in the hours following your visit to our office. The redness should gradually fade within days, the spot may turn a little bit darker than the surrounding skin, and will eventually dry up and peel away.

- A bandage usually **does not** need to be applied to an intact (non-blistered/non-open) treatment site - *though there is no harm in using one if you prefer*.
- If a blister does form, we **do not** recommend that you drain it. No special wound care will be necessary as long as the blister is allowed to remain intact and heals naturally.
 - If a blister forms and the top peels away before the underlying skin has had a chance to heal -
 - Keep the area clean with soap and water, apply Vaseline (or antibiotic ointment), and keep covered with a Band-Aid until healed.