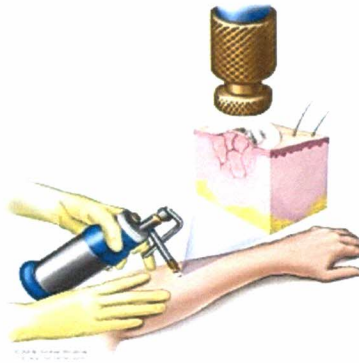


## Basic Skills Qualification Cryotherapy



### Evaluation Process

Prior to seeking BSQ certification, a resident should be confident in their skills. The “Basic Skills Qualification” is printed and given to the supervising physician, where after, the resident performs the procedure under direct observation of the supervising physician. The competency assessment is completed by the supervising physician with their signature and given back to the resident. The resident then returns the competency assessment to the Academic Coordinator.

**Resident:** \_\_\_\_\_

	Competent	Needs Work
Discusses indications and contraindications for cryotherapy		
Freezes lesion so has 2-3 mm white border		
Allows lesion to thaw and then refreezes		
Appropriate documentation		
Describes potential complications and their remedies		

**Faculty:** \_\_\_\_\_

**Date:** \_\_\_\_\_

### Indications:

- Rapid method of treatment for superficial lesions
- Benign Lesions: wart or seborrheic keratosis
- Premalignant lesion: actinic keratosis.

### Contraindications:

- Unclear lesion identification
- Possible malignant melanoma
- Young children due to pain
- Cosmetically sensitive area on the face, lip or eyelid
- Local infection should be treated prior to the procedure
- Use caution on digits due to risk of severe pain and neuropathy.
- Use caution in patients with darker skin, especially on the face.
- Take care in areas with poor circulation, especially in the elderly.

**Complications:**

- Blisters can develop if freezing too deeply or too long, and infection may occur
- Blood blisters when treating thick lesions such as warts.
- Skin discoloration, especially hypopigmentation in patients with darker skin.
- Hypertrophic scar formation or pyogenic granuloma occur rarely with healing.
- Nerve damage where nerves are superficial like sides of fingers, post-auricular, or the peroneal nerve.
- Permanent nail dystrophy if periungual lesion frozen too deeply.
- Recurrence of the lesion, particularly warts, is possible.

**Technique:**

Perform cryotherapy using either a cotton swab dipped in liquid nitrogen and applied to the lesion or a liquid nitrogen container equipped with a spray tip to apply the liquid nitrogen directly to the lesion.

1. Freeze each lesion so that the lesion is white and a 1-3 mm white halo or "ICE BALL" around the lesion is maintained for desired time.
2. Allow the lesion to thaw completely.
3. Depending on the lesion type and location, consider freezing another time.
4. The lesion can be pared down prior to freezing.
5. Always better to underfreeze than overfreeze.

	Ice Ball Size	Freeze Time	Can Repeat
Flat lesions or small papules	1-3mm	5-10 seconds	No
Thicker warts or Seborrheic Keratoses	2-3 mm	20- 40 seconds maintain ice ball.	Yes, after lesion completely thaws.

*Reference: Goldstein, B and Goldstein A. Up To Date: Derm Procedures. Updated 4/30/12.*