

# Chapter 61

## Cyclocryotherapy



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### Indications

Glaucoma, uncontrolled by medical therapy

### Essential Steps

1. Identification of correct eye
2. Retrobulbar ± van Lint block
3. Identification of treatment areas radially
4. Identification of treatment areas posterior to the limbus
5. Timed application of the cyroprobe in a circumferential manner

### Complications

- Change/loss of vision
- Intraocular inflammation
- Phthisis
- Hyphema or bleeding from the site

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- Pain
- Hypotony
- Cataract formation

## Template Operative Dictation

**Preoperative diagnosis:** Medically uncontrolled glaucoma (*OD/OS*)

**Procedure:** Cyclocryotherapy (*OD/OS*)

**Postoperative diagnosis:** *Same*

**Indication:** This \_\_\_\_-year-old *male/female* with a well-known and documented history of glaucoma had been unsuccessfully managed with medically ( $\pm$ surgically) controlled treatment plans. After a detailed review of risks and benefits, the patient elected to undergo the procedure.

**Description of the procedure:** The patient was identified in the holding area, and the (*right/left*) eye was marked with a marking pen. The patient was brought into the OR on an eye stretcher in the supine position. After proper time-out was performed verifying correct patient, procedure, site, positioning, and special equipment prior to starting the case, general anesthesia was induced. A *LMA/ETT* was placed, and local anesthetic was injected in the standard (*retrobulbar/peribulbar/van Lint block*) fashion using \_\_\_\_ ml of lidocaine and bupivacaine in a 50:50 mix. The (*right/left*) eye was prepped and draped in the usual sterile fashion. The operating microscope was centered over the (*right/left*) eye, and an eyelid speculum was placed in the eye.

*Three quadrants/270°* of the eye were identified as treatment areas for the cyclocryotherapy. The cyclocryotherapy probe was turned on, and the locations for therapy were identified 2 mm posterior to the corneal limbus. The probe was then applied in a circumferential pattern to three out of four quadrants of the (*right/left*) eye. Special care was taken to apply each treatment exactly 2 mm posterior to the corneal limbus, approximately one probe width apart for each treatment location. Each cyclocryotherapy session was conducted for \_\_\_\_ seconds, which was timed on the probe timer. Careful attention was paid so that no conjunctival or corneal involvement was encountered while applying treatment. After 270° (# *applications*) of cyclocryotherapy was performed, the (*right/left*) eye was irrigated with sterile BSS. An (*combination of antibiotic/steroid/others*) ointment was applied to the (*right/left*) eye, and the eyelid speculum was removed. A pressure patch was placed over the left eye, and the patient was transferred to the postanesthesia care unit in stable condition.

## Additional Resource

<https://www.youtube.com/watch?v=D5CRcJO3U9M>.