An Optometrist's Guide to Surgery

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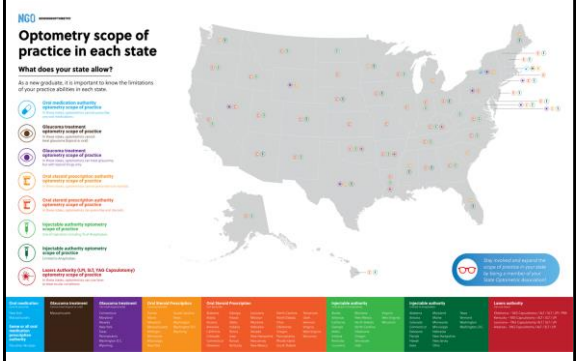
My disclosures

- No financial disclosures



What causes a chalazion?

Work up for these patients

- Patient history
- Slit Lamp examination
- External photography
- Corneal topography

Why do topography?

- To check for impact of chalazion on vision and cornea especially if larger in size

Why do Ant Seg Photography?

- Helps with patient education
- Establishes a baseline to assist in assessing disease progression.

To be compliant…

- A device dedicated to ant seg photography where you can store photos indefinitely
- Download immediately for storing and/or printing and then delete from device

Treatment Options for chalazion

- Do nothing
- Warm compresses
- Topical steroids
- Oral antibiotics
- Steroid injection
- Surgical excision

Option 1: Do nothing

- If patient is not bothered by it and it is not causing any secondary problems
- Easiest for patient to do but least appealing cosmetically

Option 2

- Kenalog injection

Factors Affecting Success

- **Duration:** Bumps present for less than a few months respond better than chronic lesions older than six months.
- **Calcification:** Hardening or calcified tissue inside the cyst lowers the likelihood of a successful response to medication.

Efficacy

- **Success Rate:** Intralesional steroid injections successfully shrink or resolve stubborn chalazia in 62–92% of cases.
- **Number of Doses:** Most patients see full resolution with a single injection, though a second injection 2 to 7 days later may be required for larger or persistent bumps.

Option 3

- Warm Compresses
- Zylet or Tobradex QID
  - Tobramycin is great for any Staph component of chalazion and/or blepharitis
  - Loteprednol helps shrink size of the chalazion

If you do this...

- How long do you wait to determine if it is working or not?
  - 2 criteria:
    - Minimum of 1 month
    - As long as it's get smaller

Option 3

- One of 2 things will happen:
- Condition will resolve with this combination
- Even if it doesn't, the chalazion will get a little softer and any adjacent inflammation will resolve so the surgical procedure will be easier

What to tell a patient

- Recovery time generally less than 24 hours
- Will go home with patch on eye so likely will need driver
- Will feel scratchy for a week or two afterwards

What I tell a patient after resolved

- Continue with warm compresses in the shower every day indefinitely
- Lid Wipes
- IPL

Pterygium

What are the Risk Factors?

- Increased exposure to sun light
- Living in subtropical and tropical climate
- Engaging in activities which require outdoor activities with no UV protection

Management Options

- Aggressive lubrication
- UV-blocking sunglasses or contact lenses
- Topical steroids
- Surgery

Aggressive lubrication

- Helps patient feel more comfortable
- May or may not help slow progression of pterygium

UV protection

- Best as preventative measure
- Doesn't help slow progression much once patient already has pterygium

Topical Steroids

- Will make patient significantly more comfortable
- Will take care of any inflammation associated with ptergyium

When does this require surgery?

- Patient wants it
- Impacting vision
- Will encroach on visual axis soon

What to tell your patient

- High recurrence rate
- Long and painful post op period

Wound Closure Options:

- Bare sclera
- Simple closure
- Conjunctival graft

Bare Sclera Closure

- No sutures or fine, absorbable sutures used to appose conjunctiva to superficial sclera in front of rectus tendon insertion
- Leaves area of “bare sclera”

Simple Closure

- Free edges of conjunctiva secured together
- Effective only if defect is very small
- Can be used for pingueculae removal

Conjunctival Graft Closure

- A free graft, usually from superior bulbar conjunctiva, is excised to correspond to wound and is then moved and sutured into place

Adjunctive Beta Irradiation

- Most common dosage is 15 Gy in single or divided doses
- Risk of corneal or scleral necrosis and endophthalmitis

Adjunctive Mitomycin C

- Most common dose is 0.02 % applied for 3 min during surgery
- Risk of aseptic scleral necrosis / perforation and infectious sclerokeratitis
- Used more often for recurrent cases

Recurrence

Timing: Most recur within 1 year

Rates:

Bare Sclera: 49 %
Conj Autograft: 35%
Mitomycin: 29%

After the procedure

- UV protection
- Liberal lubrication

When is a PI indicated?

- For an anatomically narrow angle

Risk Factors for NAG

- Increasing age
- Asian descent
- Hyperopic Prescription
- Advancing cataracts
- Being female gender
- FH of NAG

Long Term – PI Procedure

Patient comes back

- Is it safe to dilate now?

What are indications for Yag Caps?

Why does it happen?

- It is caused by residual lens epithelial cells that remain in the **capsular** bag **after** surgery and undergo proliferation, migration, and fibrous metaplasia.

Thank you!