An Optometrist's Guide to Surgery

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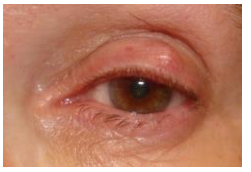
My disclosures

Dr. Gupta has no financial conflicts for this afternoon.

Progression of Optometry

- 1st Diagnostics
- Then therapeutics
- New Frontier: Minor procedures and lasers

Chalazion



- Most common cause: Underlying blepharitis

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.

Medical Options for chalazion

- Do nothing
- Warm compresses
- Topical steroids
- Oral antibiotics

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

Medical Management

- Warm Compresses
- Zylet OU 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

Oral Ab for chalazion

- Doxycycline
- Erythromycin
- Azithromycin
- Augmentin

Surgical Options for chalazion

- Steroid injection
- Surgical excision

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

Top Laser Procedures

- SLT
- PI
- Yag Caps

How many are there now?

- 12
- Oklahoma, Kentucky, Louisiana, Alaska, Indiana, Arkansas, Mississippi, Wyoming, Wisconsin, Virginia, West Virginia, Colorado

When is a PI indicated?

- For Narrow Angle Glaucoma
- When is an angle narrow?
  - When the trabecular meshwork cannot be seen for more than 180 degrees on gonioscopy

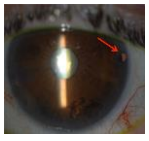
ST: Treatment of ACG

PACG : Treatment of the acute attack

- Pilocarpine eye drop 1-2% in the affected and the fellow eye
- Topical beta-adrenergic blocker
- Carbonic anhydrase inhibitor

Long Term – PI Procedure





SLT: When should it be done?

- ? 1st line?
- Non compliance
- Pt needs additional IOP lowering and no longer feasible to add more drops
- When you don't know what else to do for your patient

LIGHT (Lasers in Glaucoma and Ocular Hypertension) Study

- Found patients offered SLT as 1st choice had fewer side effects from glaucoma
- Glaucoma was controlled just as well if not better than eye drops

Problem # 1 with SLT

Success is defined as 20% IOP reduction which is inadequate

How many patients respond to SLT treatment?

75%

Problem # 3 with SLT

You cannot just keep applying more and more lasers to trabecular meshwork

Post Op Management of SLT

- Top Priority: make sure the patient's glaucoma does not progress. Pt still needs to be followed regularly

How many people have cataracts?

Estimated 29 million
Roughly 10% of the population

3.6 million
Roughly 1% of US population

HOW MANY CATARACT SURGERIES ARE PERFORMED A YEAR?

Why is it a good thing that your patient got a cataract?

- Lived long enough for it
- Lead blocker
- Chance to reset Rx

Nonsurgical Management Options

- Prevention
- Patient deals with it

Prevention

- UV glasses may delay onset
- When do you prescribe UV protection?

  80% of lifetime exposure happens by the time you are 18 years old

Prevention

- Nutrition – diet high in antioxidants plus multivitamins
- Ultimately, it is a losing battle

When do you send a patient for cataract surgery?

- No magic number – it is based on a patient's visual needs

General Trends in Procedures

- The trend is smaller incisions
- Stitch-less
- Blade-less
- The entire procedure takes 5-7 minutes

IOLs: What are the options?

- Traditional distance only IOLs
- Toric IOL
- Multifocal IOL

Monofocal Toric Bifocal

Post Operative Care

Drops:

Topical antibiotics, steroids, and NSAID

For each complication

- Why does it happen
- Do you manage it or send it back to the surgeon

Elevated IOP

Why does this happen?

- Early Post op period: Viscoelastic substance used in surgery
- Late Post op period: Topical steroids used in post op

Management

- Do Nothing
- "Burp" it
- Diamox 250 mg x 2 for a couple of days
- Topical beta blockers or Alphagan - what about Prostaglandins?

Complications

- **Wound leak**

Why does this happen?

- Surgeons don't use stitches anymore

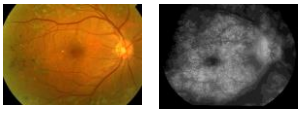
Management

- Small - Do nothing or Bandage contact lens
- Medium - Bandage contact lens
- Large - Stitch

Complications

CME

- **Even sub-clinical CME may compromise a patient's vision immediately after post-op**



Why does this happen?

- Idiopathic in many cases
- Most common reason – patient non compliant with post op drops
- More common in diabetic patients

Management

- Order OCT, if available
- Share the liability with surgeon and/or retinal specialist
- Most common treatment is topical steroids and topical NSAIDs

Indications for Glacuoma Surgery

- A patient who demonstrates progression of their glaucoma on current therapy

Noncompliance

Conventional Surgery Options

Trabeculectomy

Conventional Surgery Options

Conventional Surgery Options

Tube Shunts

Conventional Surgery Options

MIGS and Microstents

Conventional Surgery Options

Cyclodestructive Procedures