
Eyelid and Orbital Emergencies

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Financial Disclosure

Speaker, Charles Rice, M.D. has a financial interest/agreement or affiliation with Lansing Ophthalmology, where he is a shareholder and employed as a oculoplastic surgeon.









Eyelid Emergencies/Urgencies

- Chalazion with localized cellulitis
- Preseptal Cellulitis
- Contact Dermatitis
- Canaliculitis
- Dacryocystitis
- Eyelid/Conjunctival Foreign Body



Orbital Emergencies

- Orbital Cellulitis
- Orbital Inflammation
- Thyroid Orbital Inflammation
- Orbital Hemorrhage
- Orbital and Eyelid Trauma



Management

- History
- Exam

Visual Acuity

Pupillary Reaction

Eyelid and Lacrimal Exam

Globe position and Extraocular Motility

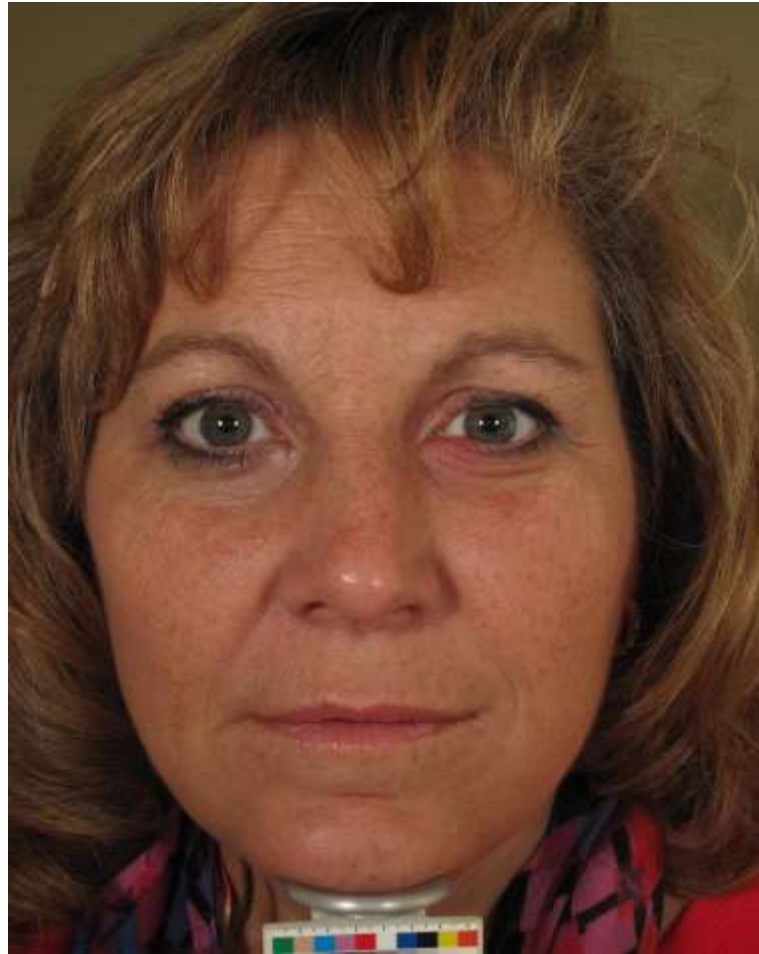


Management

- Diagnosis
 - Differential
 - Testing
- Treatment
 - Medications
 - Surgery
 - Referral



Chalazion





Chalazion with Localized Cellulitis

- May be diffuse cellulitis
- Usually painful
- Consider dacryocystitis, canaliculitis, orbital cellulitis
- Localized swelling and redness later



Chalazion with Localized Cellulitis

Treatment

- Oral antibiotic
Cephalosporin, Cipro, Bactrim
- Topical antibiotic/steroid
- Hot compresses
- Incision and drainage later



-
- 45 yo female
 - 1 month history of progressive redness and itching of eyelid area
 - Started on tobramycin and erythromycin topical
 - Benadryl
 - Lid scrubs
 - Problem continued to worsen







Contact Dermatitis

- Usually acute process
- Redness, edema, flaking of skin
- Unilateral or bilateral
- Ocular exam usually normal
- Exposure to chemicals or allergens
- Pesticides, make-up, nail polish, plant materials
- Consider bacterial infection if ocular infection



Contact Dermatitis

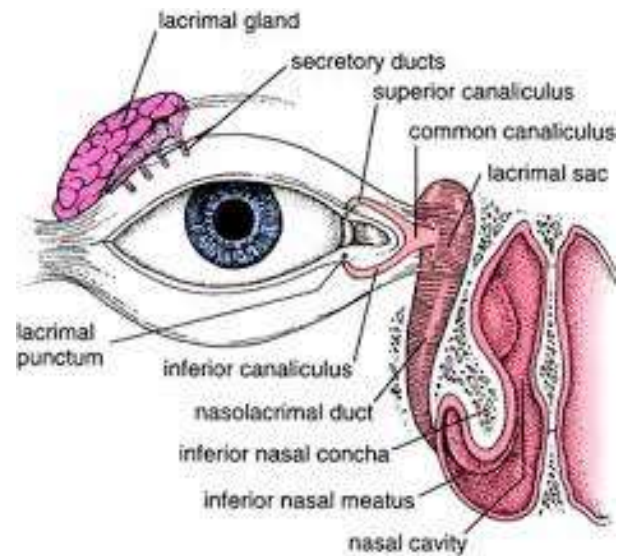
Treatment

- Discontinue topical meds and cleansers
- Topical steroid ointment- Lotemax tid
- Topical steroid cream Elocon 0.1%
- Oral antihistamines and possible oral steroids
- Topical ocular steroids and antihistamines if ocular inflammation
- Avoid warm compresses
- Later topical moisturizer such as Aquaphor
- Usually slow taper of meds over 4 to 8 weeks
- Possible referral to allergist or dermatologist





Lacrimal Anatomy



Dacryocystitis

- Nasal redness and fullness
- Usually very painful
- History of tearing
- Possible reflux of purulent material from punctum



Dacryocystitis

Treatment

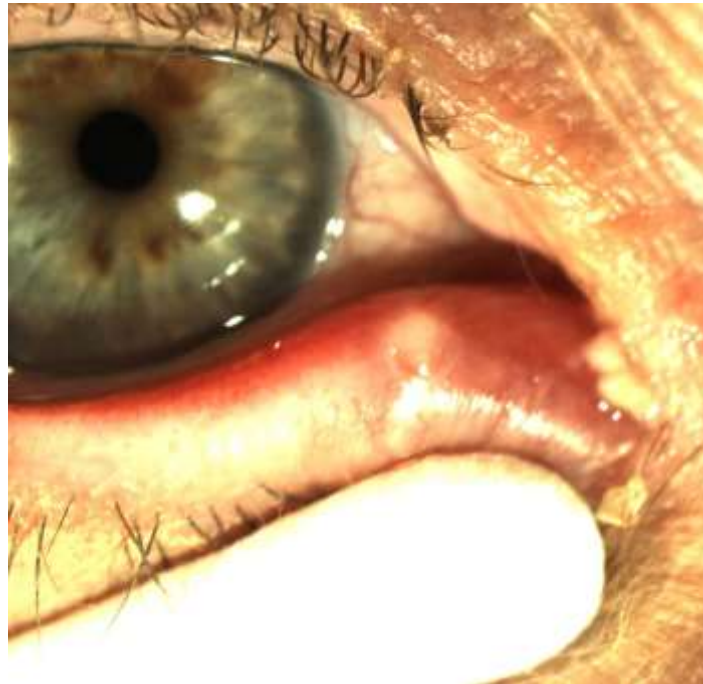
- Culture discharge if possible
- Oral antibiotic
- Hot compresses
- Possible incision, drainage, and culture
- Eventual lacrimal surgery needed





Canaliculitis

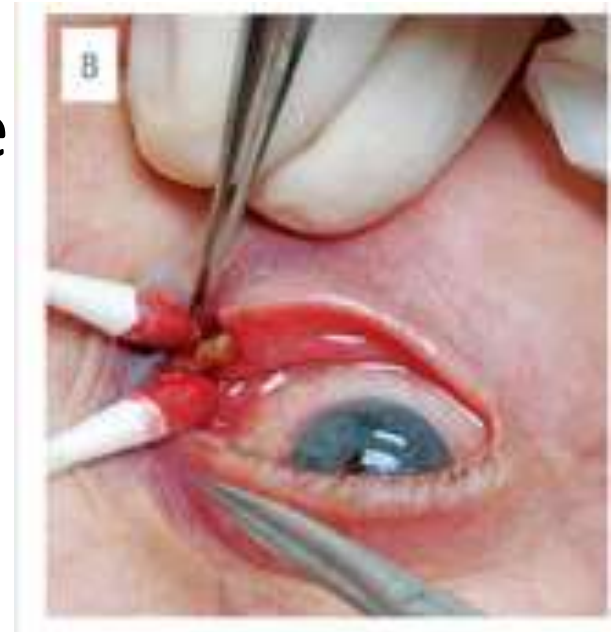
- Chronic redness and discharge
- Delayed diagnosis typical
- Often misdiagnosed as conjunctivitis
- Possible history of indwelling lacrimal plug



Canaliculitis

Treatment

- Topical antibiotic/steroids
- Eventual incision and drainage
- Removal of retained plug or concretions
- Culture reveals *Actinomyces* or bacterial infection



Canaliculitis from SmartPlug

Before

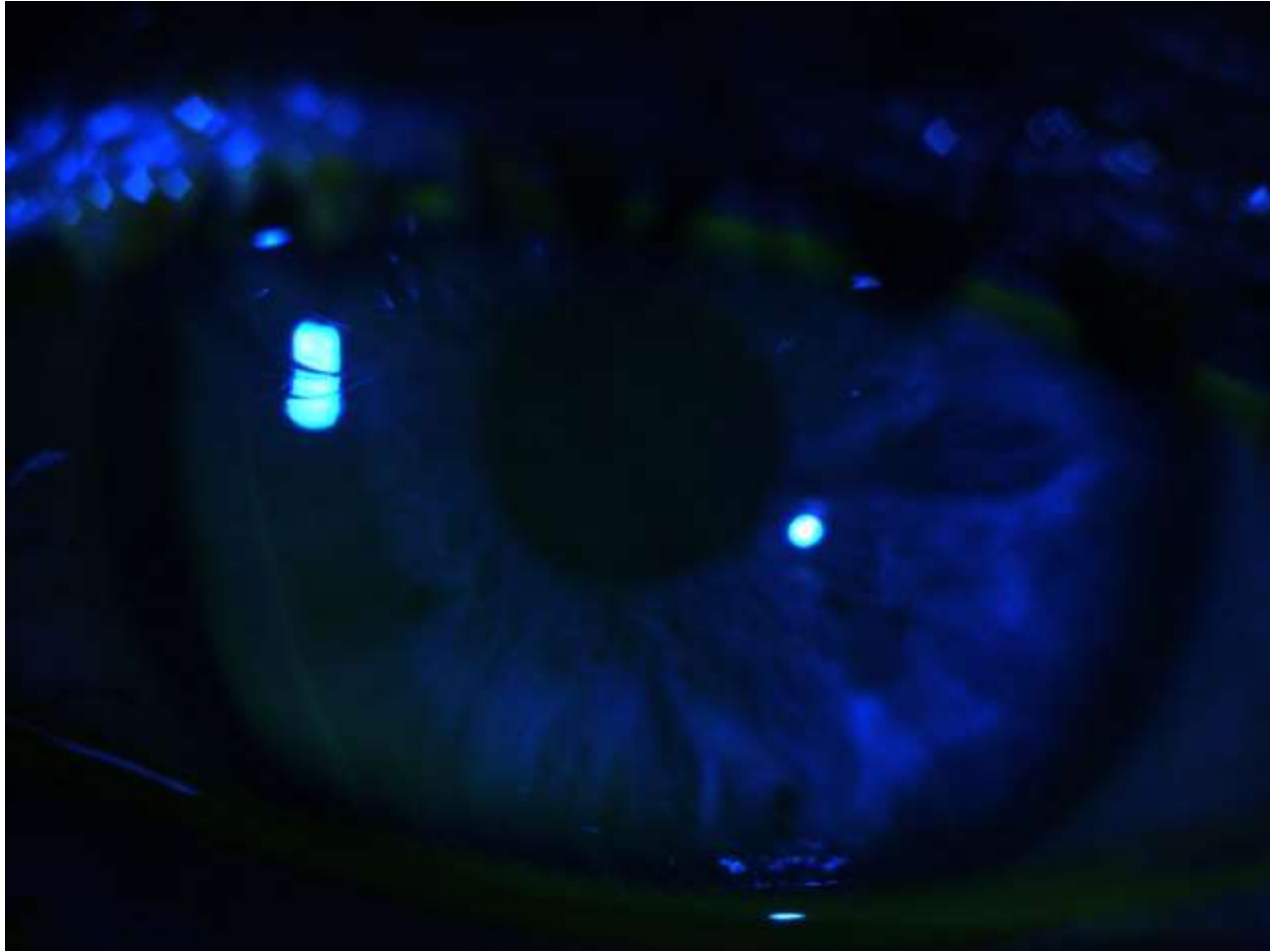


After removal

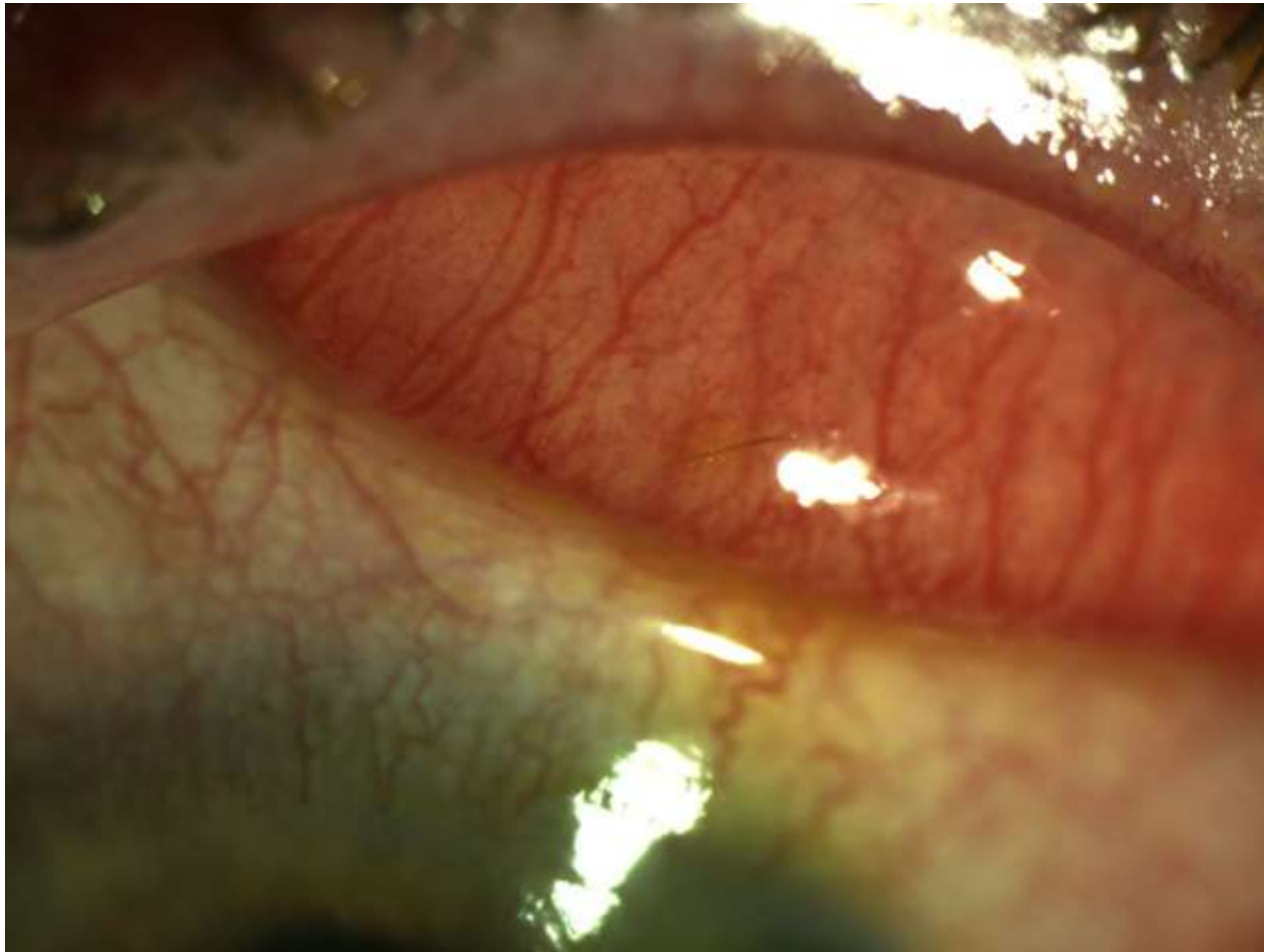


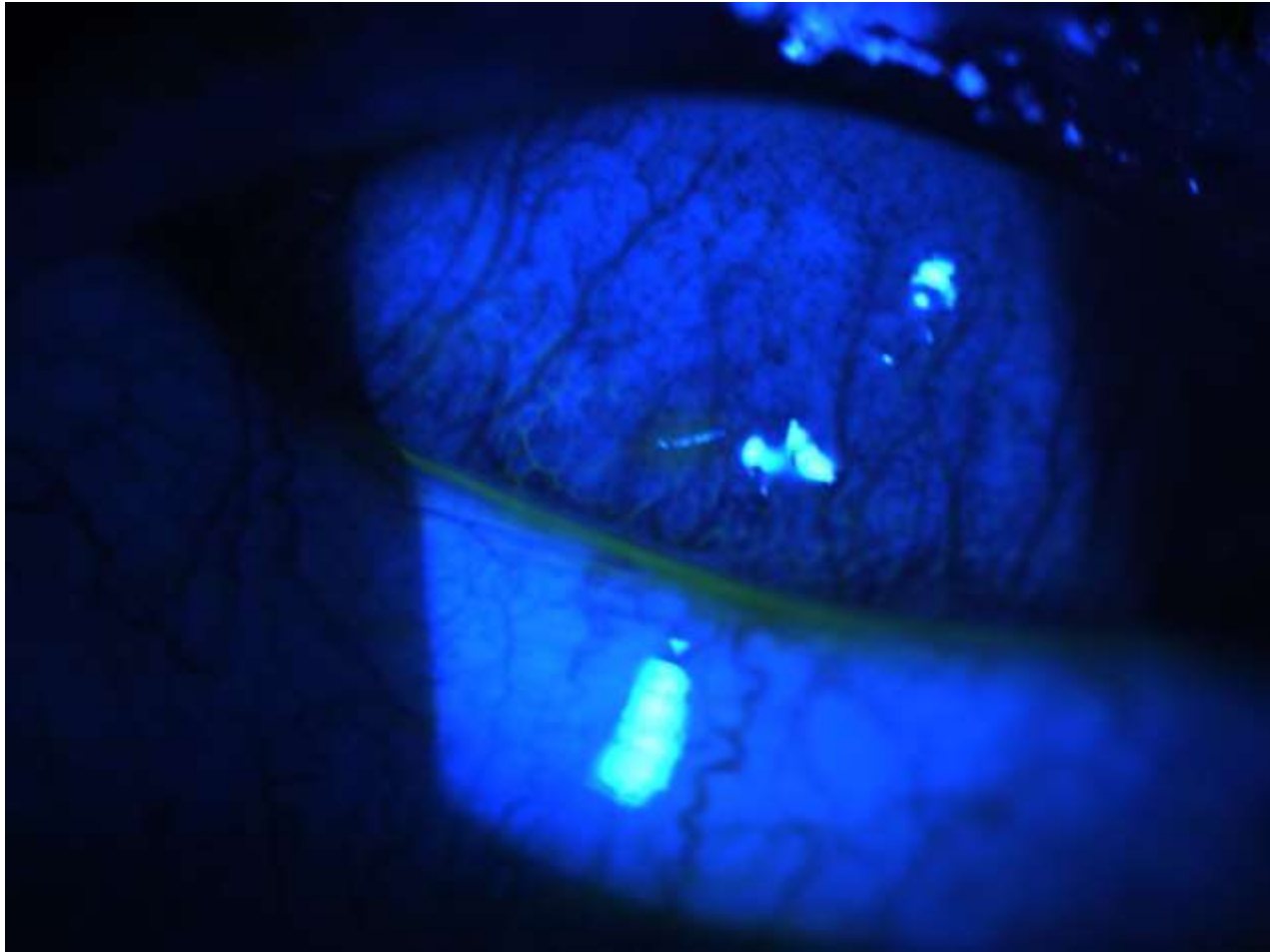
- 55 yo male
- Clearing brush, cockleburr
- Ocular irritation
- Linear corneal abrasion





Conjunctival Foreign Body











Orbital Cellulitis

- Presentation of soft tissue swelling and redness
- Orbital involvement with globe displacement
- Extraocular motility impairment
- CT scan needed for proper diagnosis
- Usually sinus disease with secondary orbital involvement



Orbital Cellulitis

Treatment

- Emergency room or ENT consultation
- Antibiotics
- Possible sinus surgery
- Subperiosteal abscess needs to be excluded



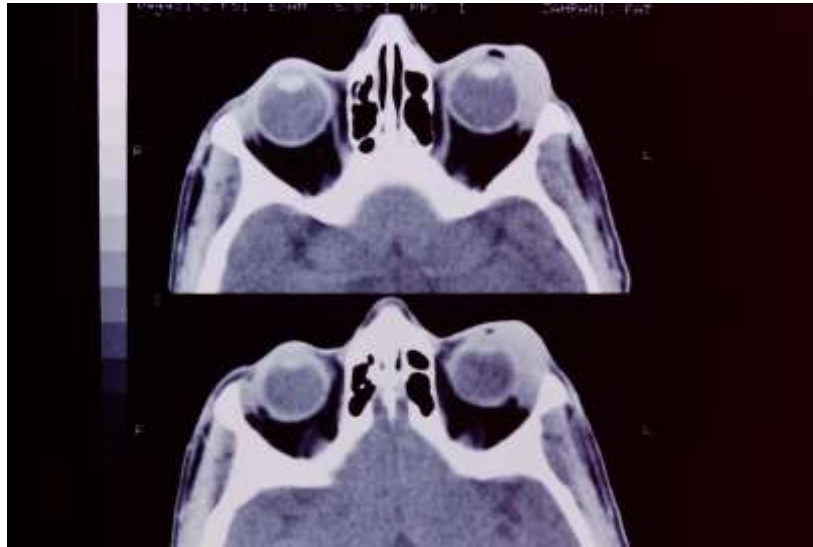
Orbital Inflammation

Infectious or Non-infectious









Idiopathic Orbital Inflammation

- Presentation with lid swelling and redness
- Proptosis
- Visual acuity usually stable
- Pain on ocular movement
- Extraocular motility limitation
- Localized inflammation of lacrimal gland, extraocular muscles
- CT scan indicated
- Localized enlargement and enhancement of orbital tissue





Idiopathic Orbital Inflammation

Treatment

- Oral steroids
- Possible non-steroidal anti-inflammatory meds
- Biopsy may be needed to exclude lymphoproliferative disease
- Response usually rapid but gradual tapering is needed



- 45 yo female
- Ocular irritation
- Decrease vision and double vision
- Diagnosis hyperthyroidism previously
- RAI tx
- Thyroid hormone levels stable



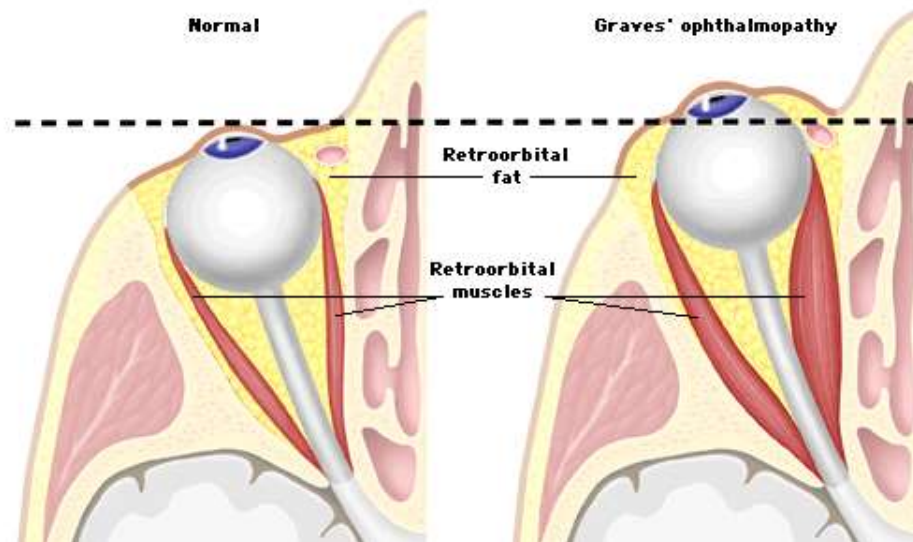
Thyroid Orbital Inflammation

- History of thyroid disease usually present
- Usual bilateral involvement
- Proptosis and conjunctival injection
- Associated lid retraction is distinguishing feature
- Acute inflammation may cause optic nerve compression



Thyroid Orbital Inflammation

- Check visual acuity, pupil reaction, color vision
- CT scan to isolate inflamed tissue
- Oral steroids
- Possible radiation therapy or surgery





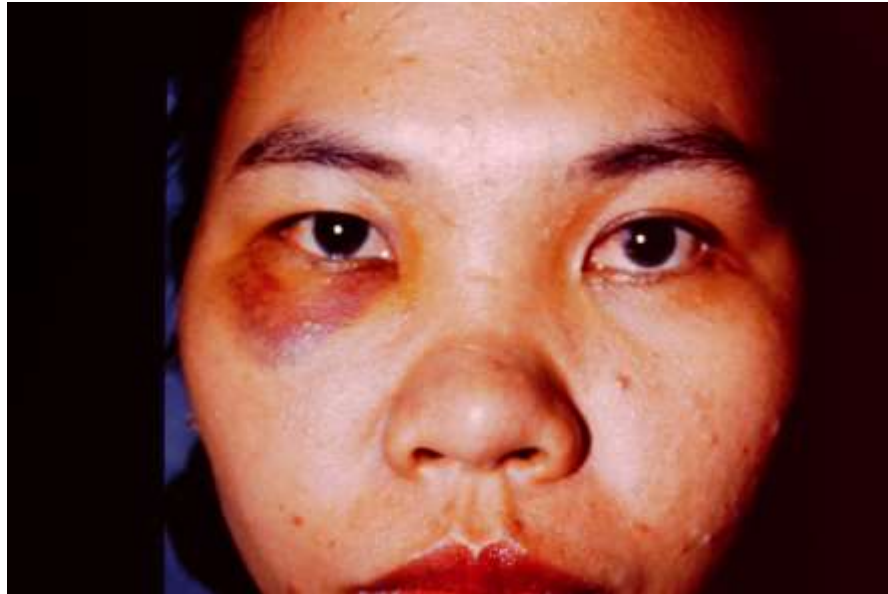


Orbital Hemorrhage

- Trauma or post surgical or injection
- Tense eyelid with proptosis, subconjunctival hemorrhage
- Decrease in vision and elevated intraocular pressure
- Emergency decompression with lateral canthotomy
- Monitor vision, intraocular pressure
- Anticoagulation and blood pressure status
- Orbital wall decompression may be needed



Orbital Trauma



Orbital Fractures

- Presentation in clinic from blunt trauma
- Site of Impact, Ocular vs. Bone
- Visual acuity measurement
- Direct ocular impact may result in ocular injury
- Hyphema, angle recession, retinal injury
- Long term risk for glaucoma or retinal detachment
- Indirect injury less likely to cause ocular damage
- May result in optic nerve damage from shearing of optic nerve



Orbital Fractures

Evaluation and Treatment

- Suspect if infraorbital hypesthesia or nasal bleeding
- Surgery for entrapment or large fracture
- Can wait 7 to 10 days for swelling to diminish
- Most require observation

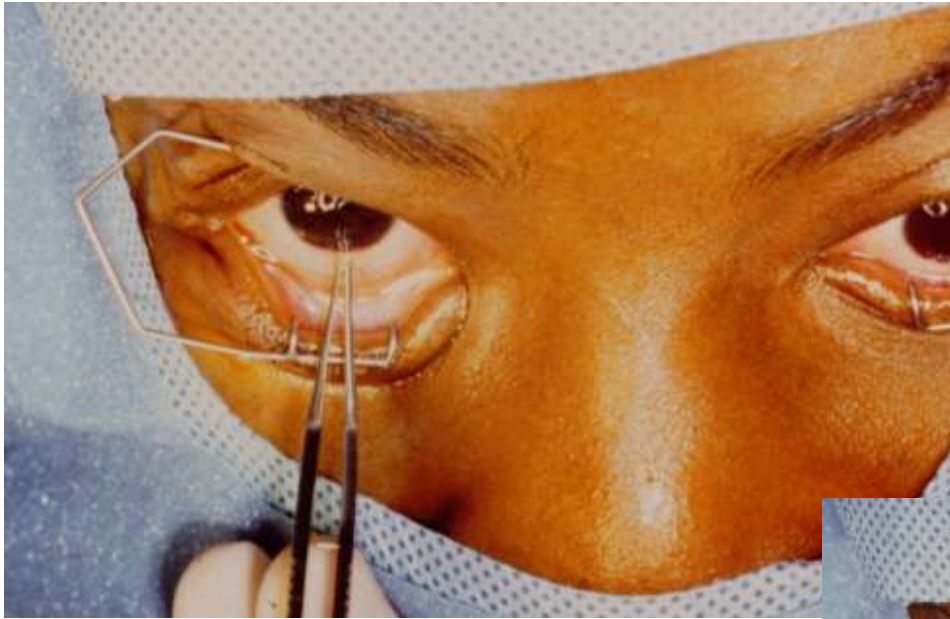


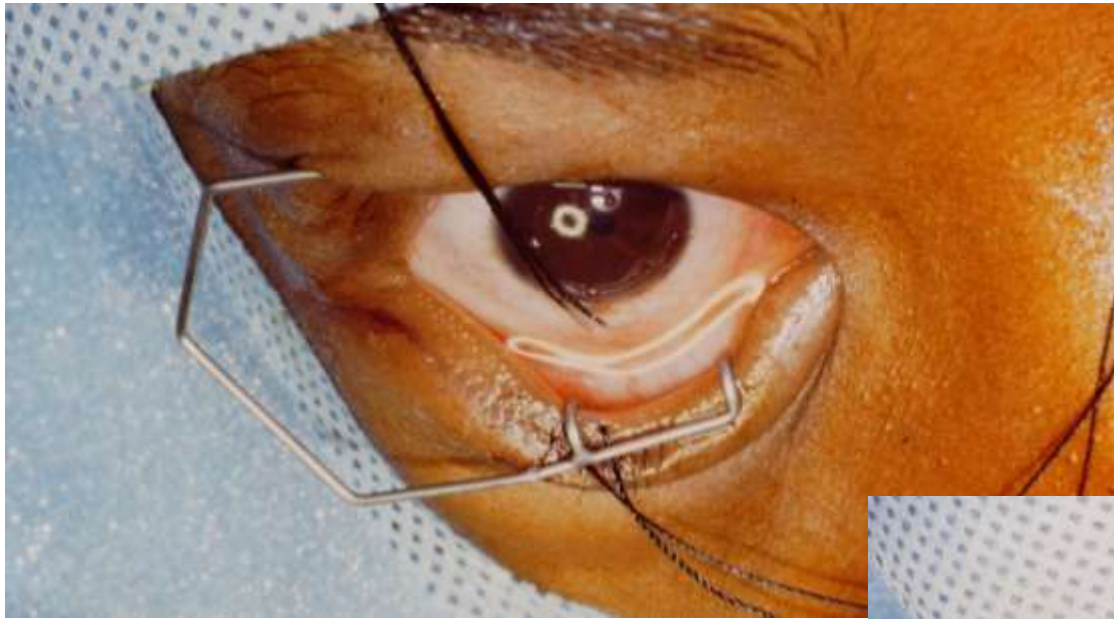


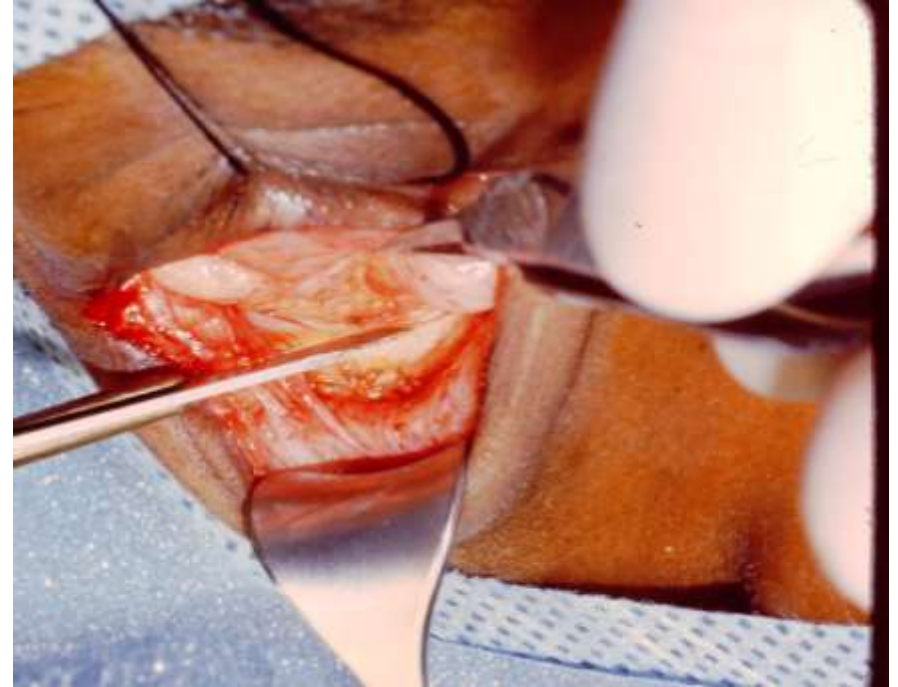
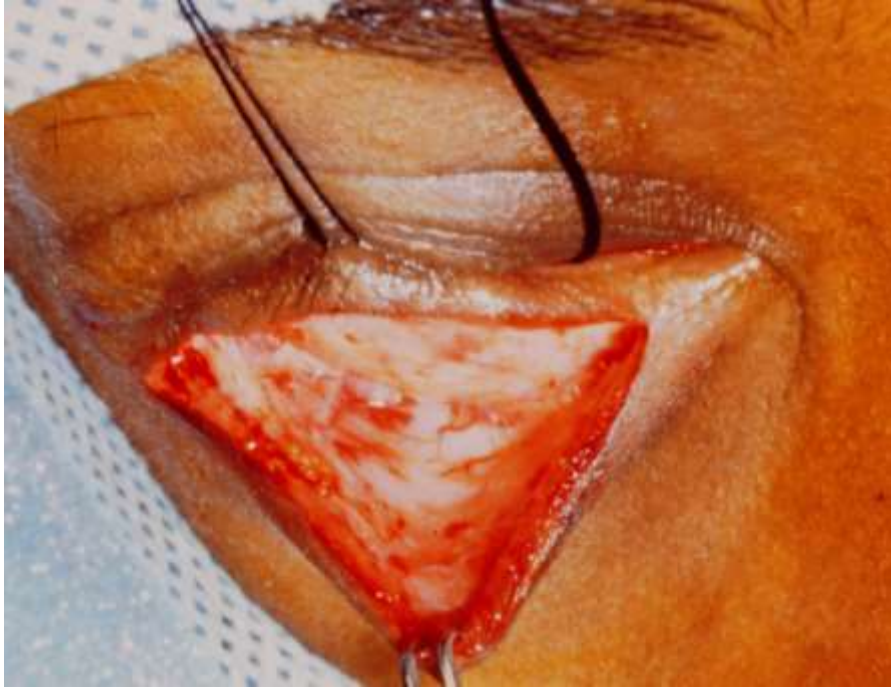
Orbital and Eyelid Trauma

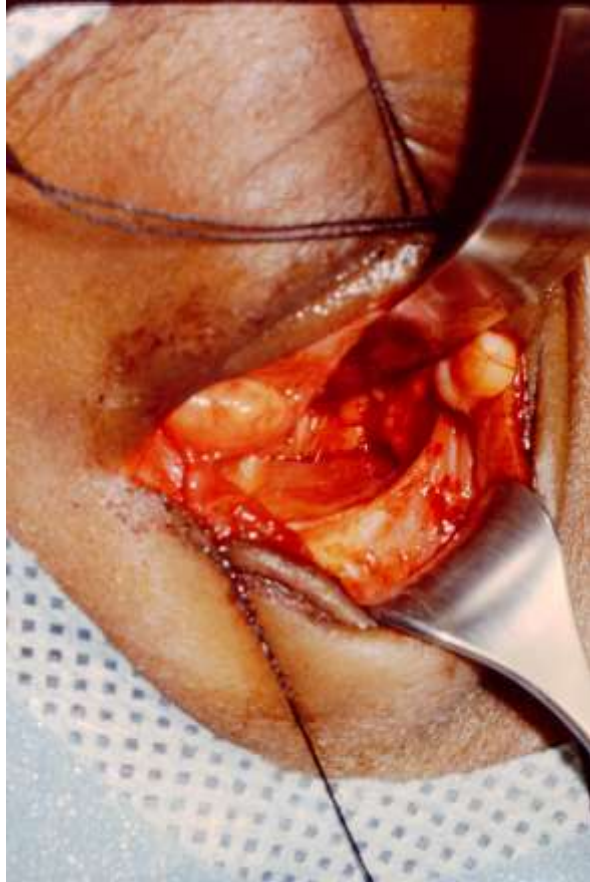




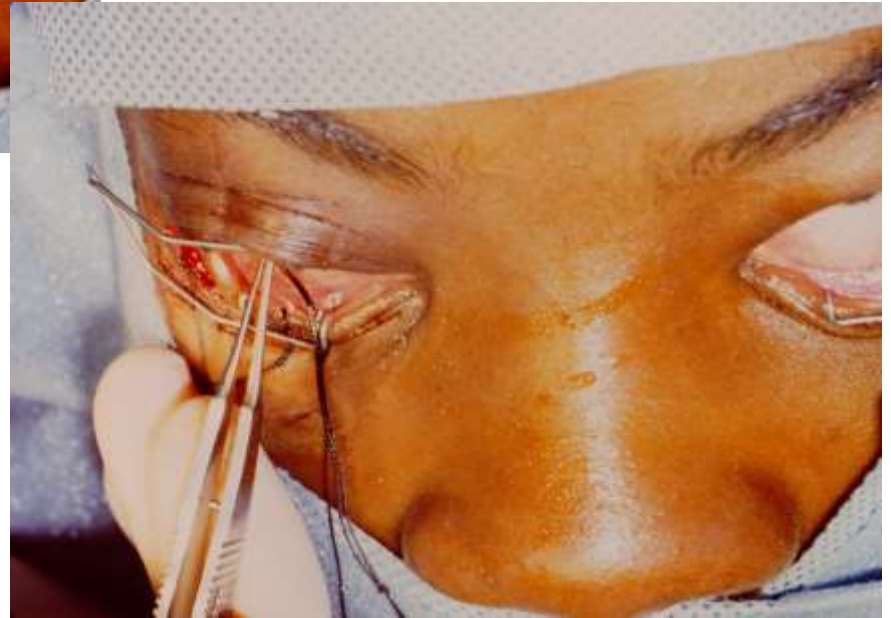
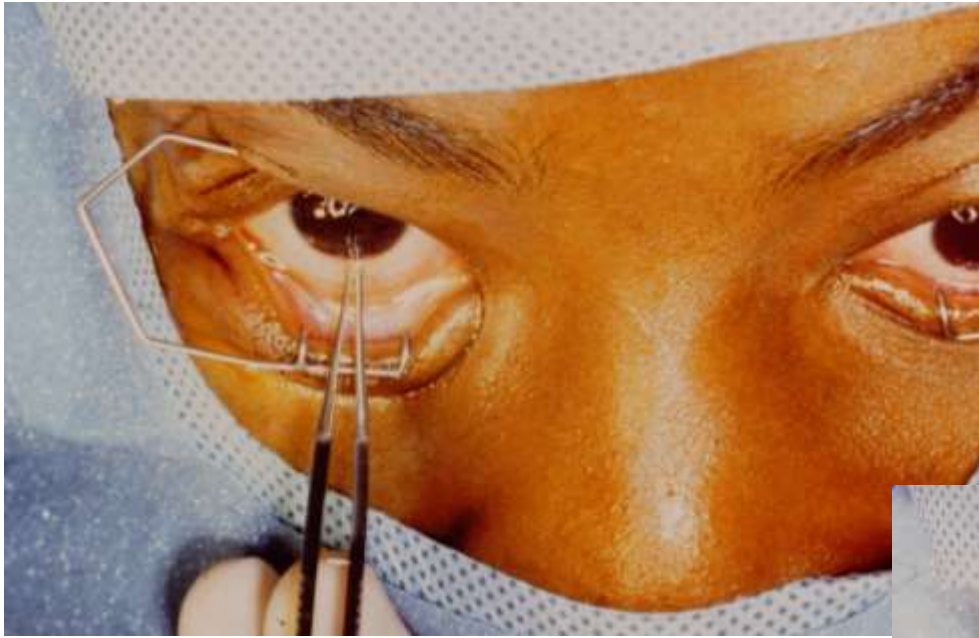
















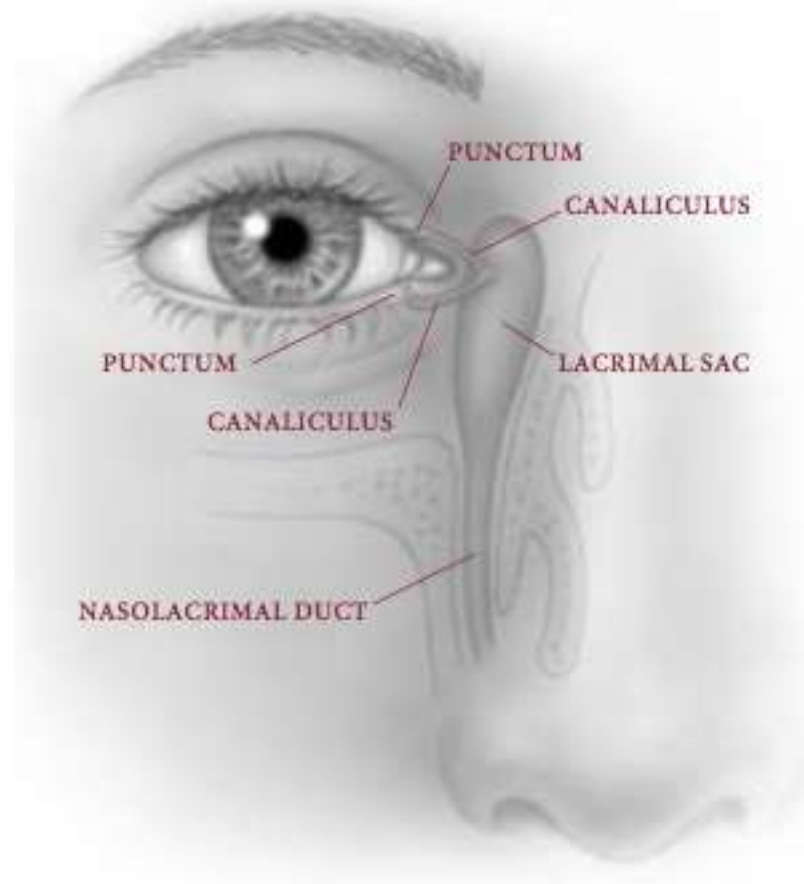


Eyelid Lacerations

- Full thickness require direct repair
- Medial avulsion often results in canalicular laceration
- Look for displacement of lower punctum laterally for sign of canalicular laceration



Canalicular Laceration Repair







Questions

