Ptosis

- Def: drooping of the upper eyelid
- Refresher: two elevating muscle
  - levator aponeurosis
  - Muller’s
  - Both originate from the levator muscle proper

Ptosis classification

- Neurogenic
- Aponeurotic
- Mechanical
- Myogenic

Ptosis: Neurogenic classification

- CN III palsy
  - Compressive (ie. tumor, aneurysm) vs. Ischemic (diabetic)
  - hypotropia, exotropia “down and out”
  - with or without pupil sparing
- Horner’s syndrome
  - Interruption of the sympathetic chain
  - central, pre- and post ganglionic lesions must be differentiated
- Triad: ptosis, miosis, anhidrosis
**Ptosis: Neurogenic classification**

- Marcus Gunn jaw-winking phenomenon
  - Congenital unilateral ptosis with retraction of the lid when the pterygoid muscles are stimulated (ie. chewing)

**Ptosis: Neurogenic classification**

- Misdirection of CN III or aberrant regeneration
  - Congenital or s/p CN III palsy.
  - Characterized by involuntary, nonspecific movement of the upper lid during versions.

**Ptosis: Aponeurotic**

- Involutional (aging)
  - Degeneration of the levator aponeurosis
  - Clinical clues: thinned eyelid above the tarsus, good levator function, bilateral

**Ptosis: Aponeurotic**

- Dehiscence, disinsertion, attenuation, stretching
  - Variable degrees of ptosis
  - Generally good levator function

**Ptosis: Aponeurotic**

- Postoperative (ie. cataract, RD)
  - Probably dehiscence or disinsertion of lev. aponeurosis secondary to bridle suture
  - Chronic topical steroid use
Ptosis: Aponeurotic

- Blepharochalasis
  - Rare
  - Characterized by recurrent episodes of non-pitting edema lasting only days. Over time lids become thin, atrophic, wrinkled.
  - Young adults

Ptosis: Mechanical

- Lid edema
- Tumors
- Conjunctival scarring

Ptosis: Myogenic

- Caused by a disorder of the levator muscle itself or at the neural-muscular junction. Congenital or acquired.

Ptosis: Congenital Myogenic

- Simple vs. Blepharophimosis
  - Simple: dystrophy of levator. May also have superior rectus weakness
  - Blepharophimosis: AD trait. Wide intercanthal distance, epicanthus inversus and congenital ectropion

Ptosis: Acquired Myogenic

- Myasthenia Gravis (MSG)
  - Autoimmune disease affecting the neuromuscular junction and impedes neuromuscular transmission
  - A decrease in the number of available acetylcholine receptors by circulating antibodies
  - Fluctuating weakness and fatigue of voluntary musculature
  - Other signs include variable diplopia and lid twitch
Canaliculitis

Def: Inflammation and infection of the canaliculus area.

Etiology
- Actinomyces israelii
  Most common chronic cause. Gr. + rod, fine branching filaments
- Fungal (Candida, Fusarium, Aspergillus)
- Viral (herpetic)
- Other bacterial

Canaliculitis

Symptoms: tearing, discharge, red eye, mild tenderness over nasal aspect
Signs: Erythematous pouting punctum, surrounding red skin, mucopurulent discharge expressed, concretions expressed.

Canaliculitis: Helpful clinical hints
- Q-tip: Apply pressure and roll toward punctum
- Smears and cultures

Canaliculitis: Treatment
- Remove concretions
  - expression
  - canaliculotomy
- Irrigate with antibiotic in upright position
- If fungal/viral use appropriate meds
Dacryocystitis

- **Def:** Infection of the lacrimal sac
  - Often occurs when there is blockage of the nasolacrimal duct.
  - Other etiologies: Trauma, nasal/sinus surgery

Dacryocystitis: Signs

- Red, swollen tender area very medially lower lid and extending into the periorbital area. Mucous or mucopurulent discharge *may* be expressed from the punctum.

Dacryocystitis: Acute

- Watch for complications such as facial or orbital cellulitis
  - May need to drain lac. sac with a stab incision if filled with pus and distended
  - Treat acute infection with PO antibiotics and warm compresses +/- AB gtts
  - Once acute infection is under control refer for DCR
  - Goal is to obtain relief of obstruction.

- **Afebrile**
  - Children: Augmentin, cefaclor
  - Adults: Dicloxacillin, Keflex

- **Febrile**- hospitalize with iv antibiotics
Dacryoadenitis

- Def: infection/inflammation of the lacrimal gland
  - Most often seen in children and young adults
  - Can be acute or chronic

Acute

- Bacterial: staph. aureous, N. gonorrhea, strept.
- Viral: mono, influenza

Chronic

- Rule out lacrimal gland mass (ie tumor) of infiltrative disease (ie sarcoi, TB, syphilis, leukemia etc)

Dacryoadenitis: signs

- Unilateral erythema, swelling, tender area over the outer 1/3 of upper lid.
- Tearing, discharge, ipsilateral PA node, temporal chemosis, fever, elevated WBC count are also possible.

Dacryoadenitis

- Pt generally complains of pain, redness, swelling the affected are. Possibly diploia.

- Treatment
  - Bacterial: strong PO AB (augmentin, Keflex. If moderate to severe hospitalize with IV AB
  - Viral: Cool compressed, tylenol
  - Monitor daily for progression to orbital involvement.
Congenital NLD obstruction

SX: persistent tearing, chronic, mild discharge, matting
Signs: “Wet” eye, crusting in lids, may express discharge from punctum, skin may be irritated, affected area may be red, swollen.

NLD obstruction

Etiology: membrane at distal end of NLD
DDX: Conjunctivitis, anomalous upper lac. drainage system, congenital glaucoma, corneal defect, FB, trichiasis

NLD obstruction: Treatment

- Digital massage
- If significant discharge AB ung
- Warm compresses
NLD obstruction

- 95% spontaneously resolve by 9-10 months
- If NLD probing is performed on unresolved cases between 9-12 months, there is a 95% success rate. If probing is performed much after the first birthday, success rate decreases.

Differential Diagnosing

- Conjunctivitis
- Other causes of tearing (FB, lid abnormality, corneal defect congenital glaucoma)
- Atresia of the puncta