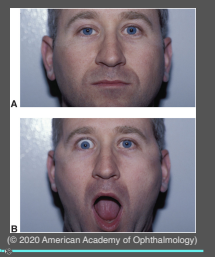
Congenital Ptosis

Case Description
young child with droopy eyelid since birth

Image Description

external photograph shows left-sided ptosis of ≈ 5 mm (margin-reflex distance 1 of 0.5 mm)

Differential Diagnosis
- simple congenital ptosis
  - unilateral or bilateral
  - present at birth and stable
  - decreased levator function
  - poorly formed (or absent) upper eyelid crease
  - involved eyelid may be higher in downgaze
    - eyelid lag
    - lagophthalmos
  - compensatory brow elevation or chin up position
- Marcus Gunn jaw winking
  - most common form of congenital synkinetic neurogenic ptosis
  - unilateral
  - ptosis — none - severe
  - winking while chewing — eyelid elevates
    - movement of the mandible to the opposite side
    - jaw protrusion
    - wide opening of the mouth
    - when the teeth are clenched



- traumatic ptosis
- CN 3 palsy
- Horner syndrome
  - unilateral
  - 2-3 mm
  - lower eyelid reverse ptosis
  - miosis
- blepharophimosis syndrome
  - AD
  - ptosis
  - blepharophimosis
  - telecanthus
  - epicanthus inversus
- pseudoptosis
  - dermatochalasis
  - enophthalmos
  - hypotropia
  - contralateral proptosis/lid retraction

Data acquisition
- History
  - review old photographs — age of onset & course
  - trauma/surgery
  - variation with chewing or with eye movement
  - family history of congenital ptosis — blepharophimosis syndrome
- Physical Exam
  - VA — r/o amblyopia
  - EOM — r/o CN 3 palsy
  - brow & head position
  - look for corneal exposure — lagophthalmos
  - check corneal sensation
  - Bell phenomenon
  - eyelid exam
    - lid position
      - measure vertical palpebral fissure
      - distance between corneal light reflex and upper lid margin — margin-reflex distance 1
    - levator function — manually fix eyebrow — decreased levator function in upgaze
    - indistinct/absent eyelid crease
    - remains elevated with downgaze — lid lag
  - examine pupils — miosis with anisocoria worse in dark — Horner syndrome
  - heterochromia — Congenital Horner syndrome
  - cycloplegic refraction — anisometropia with high cylinder

Assessment
Congenital ptosis

Treatment
- refractive correction — spectacles
- amblyopia treatment
- mild, no amblyopia, no abnormal head position — observation
- severe/amblyopia/ abnormal head position — frontalis suspension
  - autologus fascia lata
  - artificial material

Patient Education
- Prognosis — good prognosis with timely treatment of ptosis & amblyopia
- Prognosis & Complications
  - astigmatism
  - strabismus
  - amblyopia
  - corneal exposure after ptosis surgery
- Follow-up — observation — q 3-12 months

Ophthalmology Mind Maps/Arman Mashayekhi, MD