

Post-traumatic ptosis

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Ptosis vs. Post-traumatic ptosis

- ‘Drooping or sagging of eyelids’
- Upper eyelid margin lower than normal, obscuring visual field, requiring compensatory head posture or resulting in amblyopia (children)

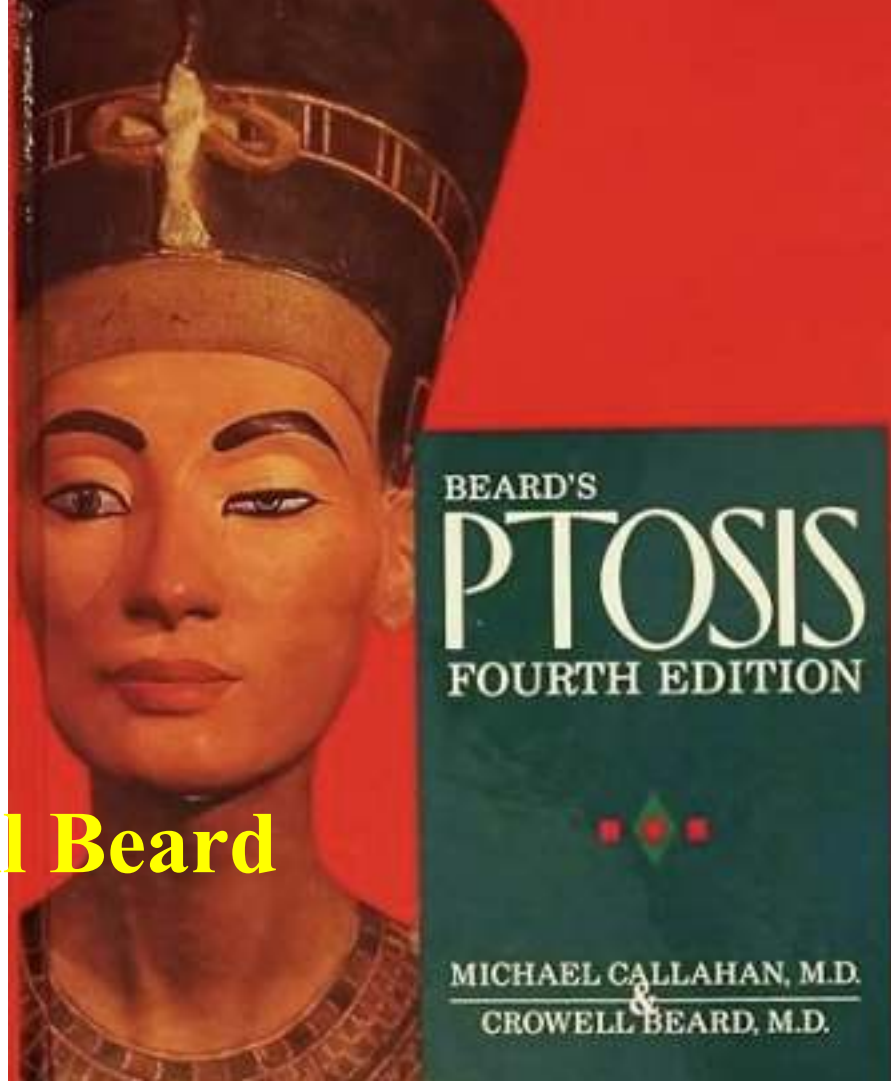
Post-traumatic ptosis

- Any or many of various causes resulting in drooping of the eyelid, directly or indirectly from trauma, surgery, etc





Crowell Beard



Classification of ptosis

Pseudo ptosis

- Enophthalmos



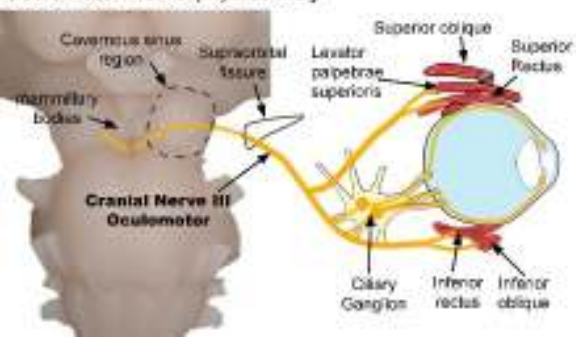
- Lid retraction



True ptosis

- Neurogenic
- Aponeurotic
- Myogenic
- Mechanical

Oculomotor Nerve (III) Pathway



Etiology of ptosis

Peripheral

- Central
- Brainstem disorders
- Nucleus
- Supranuclear

- Efferent nerves (III Nerve)
 - Partial
 - Complete
- Sympathetic nerve
- Aponeurotic
- Mechanical
- Cicatricial: anterior, middle, posterior lamella
- Paralytic: Botulinum toxin,

Classification

Neurogenic ptosis

- III N Palsy
- Horner's syndrome

Aponeurotic ptosis (Levator dehiscence)

CL related
Post ocular surgery
(cataract,
glaucoma,
refractive surgery,
etc)

Myopathic ptosis

- Myasthenia gravis
- Myotonic dystrophy

Mechanical ptosis



Neurogenic ptosis



Post-traumatic ptosis

- 'not one condition'
- Complex
- Multifactorial
- Challenging
- Repeat surgeries



Post-traumatic ptosis - Causes

- Neurogenic
- Aponeurotic
- Myopathic
- Mechanical
- Cicatricial*



Clinical assessment

- History
- Neurologic exam
- Dynamic eyelid examination
- Orbital exam
 - Proptosis vs. Enophthalmos, globe dystopia, etc



Dynamic & complete facial examination



- Facial animation
- Treated with Botulinum toxin

- Facial asymmetry

‘J Richard O Collin’



Assessment in planning Management

- Complete diagnosis
- Vertical / horizontal Palpebral fissure
- Intercanthal distance
- MRD1
- Levator function
- Lid crease
- Anterior lamellar assessment
- 'En'ophthalmometry



Spectrum of surgeries

Anterior Approach

- Levator reattachment
- Levator advancement
- Levator resection
- (supramaximal) levator resection
- Whitnall's suspension

Posterior Approach

- Muller's muscle-conjunctival resection (MMCR)
- White-line advancement
- Levator resection



Suspension procedures

- Frontalis suspension
 - Silicone rod
 - Fascia lata (autologous, donor)
- Frontalis muscle flap technique

1. Neurogenic ptosis: III Nerve palsy

Challenging to Treat

Staged surgeries vs. Single stage surgery

Strabismus Surgery: Periosteal fixation of Medial rectus

Ptosis Surgery:

Supramaximal levator resection vs. Whitnall's suspension vs. Frontalis sling vs. Frontalis Flap



Neurogenic ptosis: Horner's syndrome

Posterior approach >> Anterior Approach

'Muller's muscle Conjunctival resection (MMCR)'



2. Aponeurotic ptosis

Levator reattachment

Levator advancement

Levator resection



3. Mechanical ptosis

Trauma

Hematoma

Muscle contusion

Pain

Observation



4. Mechanical ptosis

Injury with Open Globe Injury

Repair with NLP and Phthisis bulbi

Enucleation with Implant with residual ptosis



Prosthetic fitting

Levator resection



Facial nerve palsy

Temporal bone fracture with VI, VII N palsy



Principles of Management

- Hematoma/acute posttraumatic mechanical ptosis – Observation
- Paralytic ptosis: neurogenic: 3-6 months
- Anophthalmic ptosis
- Prevention : good primary management*
- Realistic expectations
- Be prepared for revision surgeries

**“First time
is the Best
time”**





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OPHTHALMIC TRAUMA
SOCIETY



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Trauma-Free 2026**



Dr. Gangadhara Sundar
President, APOTS

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Thank you


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