

Blepharoplasty

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Brow position

- medial brow as having its medial origin at the level of a vertical line drawn to the nasal alar-facial junction
- lateral extent of the brow should reach a point on a line drawn from the nasal alar-facial junction through the lateral canthus of the eye
- brow should arch superiorly, well above the supraorbital rim, with the highest point lying at the lateral limbus
- Less arched in men
- midpupillary line and the inferior brow border should be approximately 2.5 cm. The distance from the superior border of the brow to the anterior hairline should be 5 cm



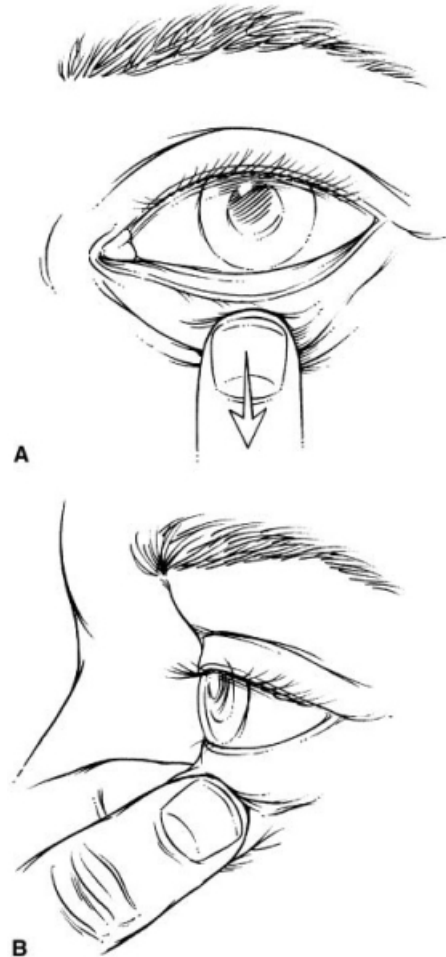
Eyelid aesthetics

- The highest point of the upper eyelid is at the medial limbus, and the lowest point of the lower eyelid is at the lateral limbus.
- Sharp canthal angles should exist, especially at the lateral canthus.
- The upper eyelid orbicularis muscle should be smooth and flat, and the upper eyelid crease should be crisp. The upper lid crease should lie between 8 and 12 mm from the lid margin in the Caucasian patient.
- The upper lid margin should cover 1 to 2 mm of the superior limbus, and the lower lid margin should lie at the inferior limbus or 1 mm below the inferior limbus
- The lower eyelid should closely appose the globe without any drooping of the lid away from the globe (ectropion) or in toward the globe (entropion)



Lid laxity and excess

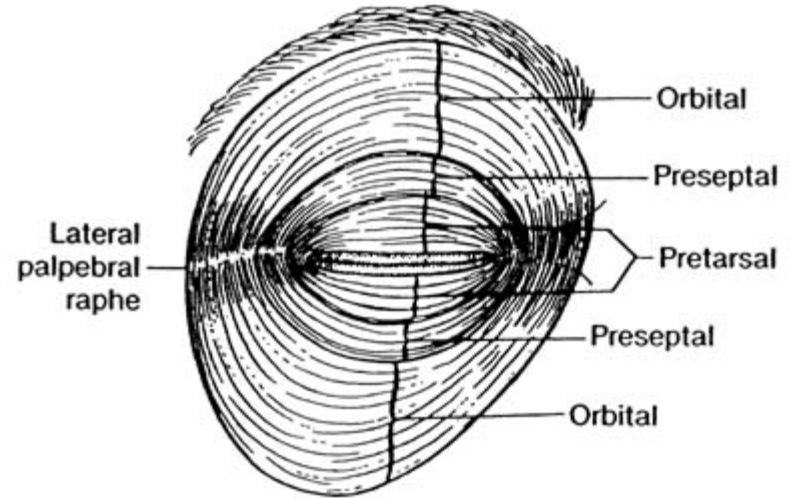
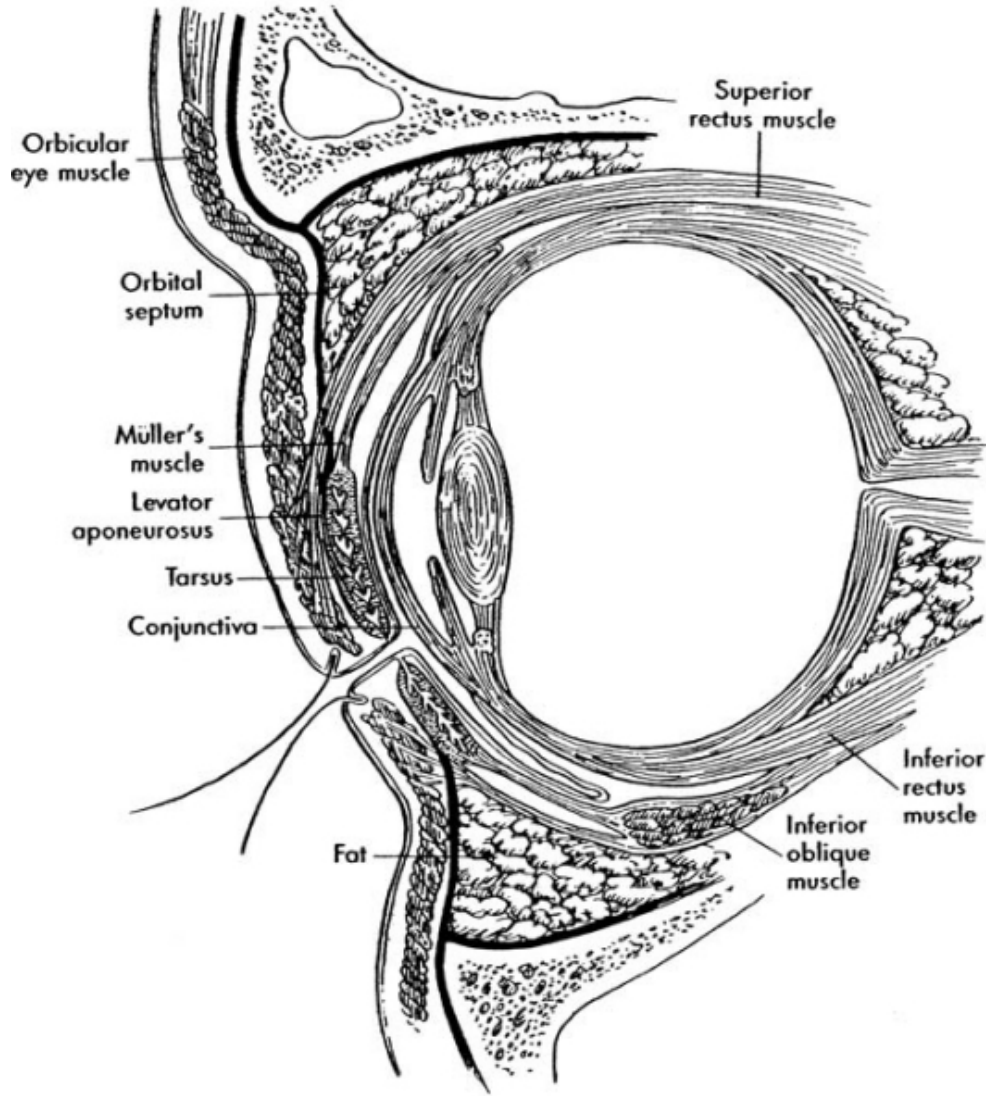
- A pinch test helps determine the degree of excess lid skin that is present. The snap test helps determine the degree of lower lid laxity and is useful in preoperative planning



Evaluation

- Motivational history
- Medical history
- Examination
- Surgical options
- Preoperative preparation
- Postoperative care and course
- Problems and complications

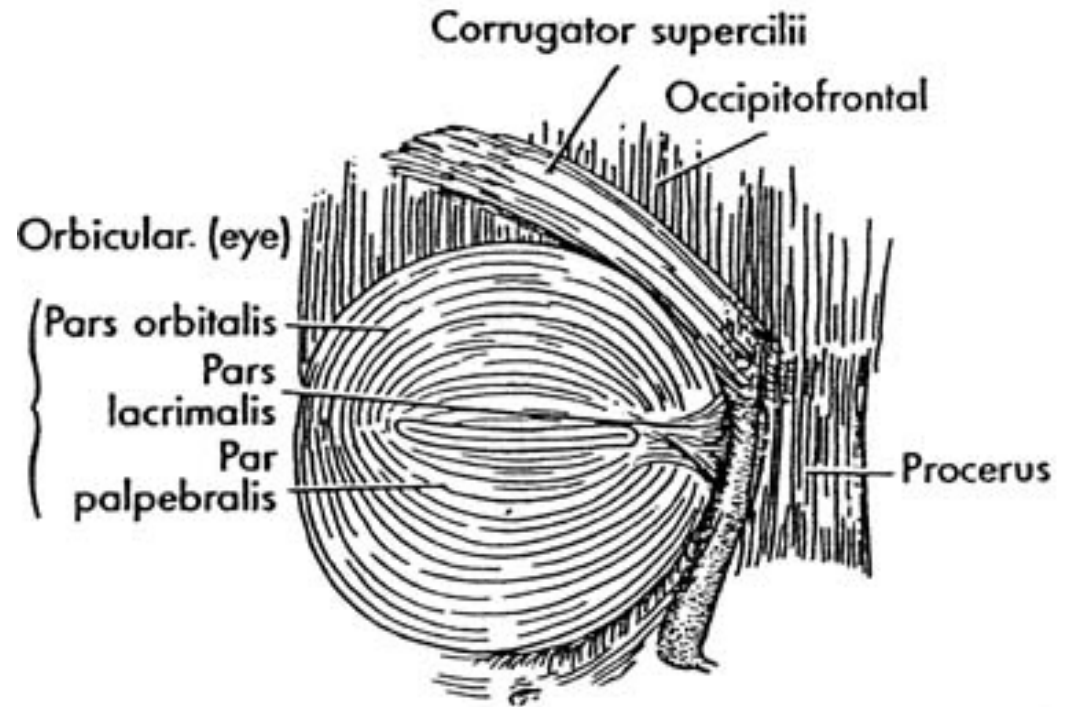
Eye lid anatomy



upper lid crease is the line that is formed by the insertion of the levator aponeurosis and orbital septum into the orbicularis oculi muscle and skin

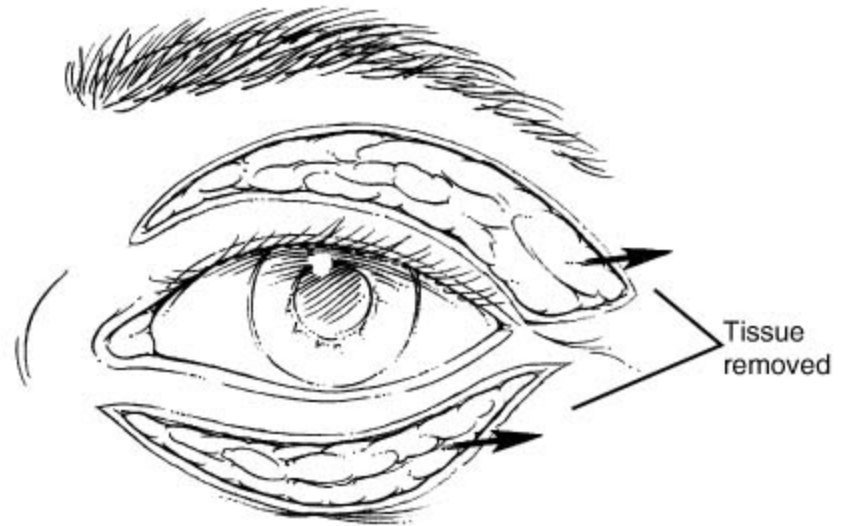
Brow musculature

- There are four muscles in the eyebrow: frontalis, procerus, corrugator supercilii, and orbicularis oculi
- Corrugator supercilii contraction causes vertical glabellar rhytids, and procerus contraction causes horizontal glabellar rhytids



Eye lid anatomy

- Lower eyelid three fat pads: medial, central, and lateral.
 - The medial and central fat pads are separated by the inferior oblique muscle
- The upper eyelid contains two fat pads medially and centrally and the lacrimal gland laterally.
 - The medial and central fat pads are separated from the superior oblique



Surgical Evaluation

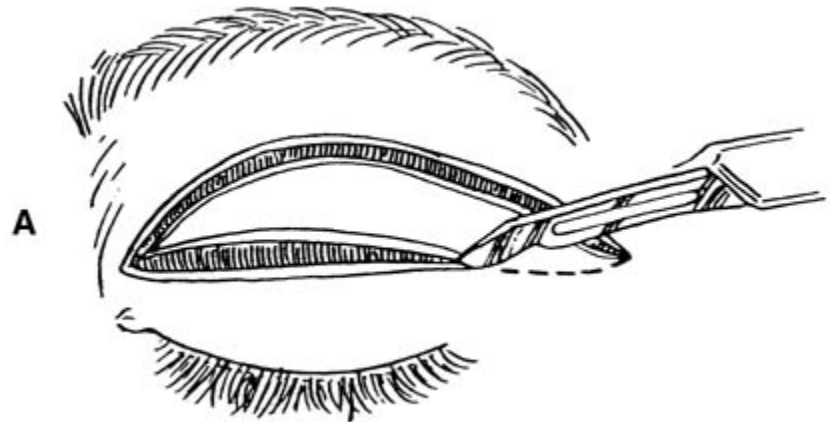
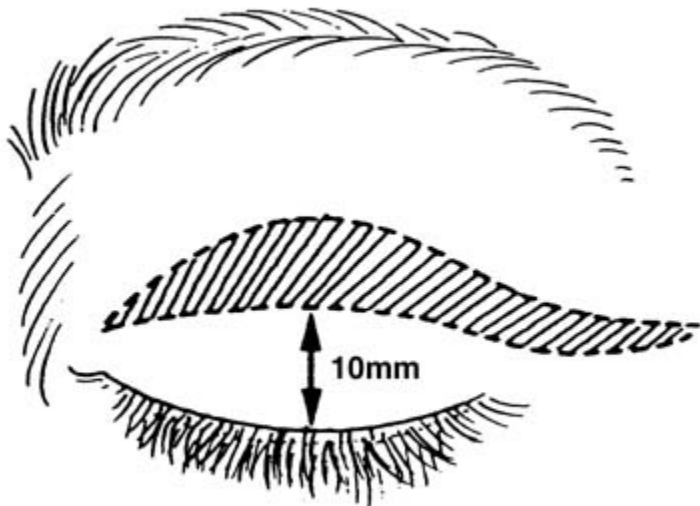
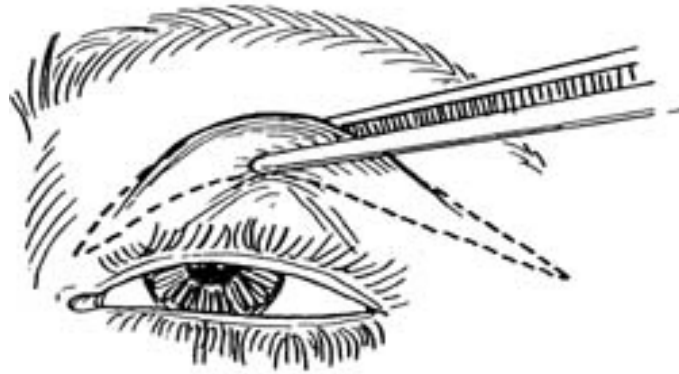
- Upper lid-brow complex
 - Brow ptosis must be addressed prior to blepharoplasty
- Ptotic lacrimal gland
- Fat pads
- Excess skin
- Skin type
 - Thin-skinned, older patients require conservative resection to avoid hollow look
 - Heavy thick-skinned, younger patients requires more aggressive approach
- Lagophthalmos
- Recent onset of ptosis
- Dry eyes
- visual acuity
- Presence of Bell phenomenon
 - Absent bell phenomenon at risk for corneal ulceration with post op lagophthalmos

Surgical evaluation

- Preop scleral show
- Strength of the orbicular oculi and tension of the lid
 - Snap test, pinch test
- Presence of malar bags
- Presence of skin lesions
- Presence of lateral orbital rhytids
- Type of surgical approach for lower lid
 - Subciliary skin-muscle flap – older patient with large fat pseudo herniation, redundant skin and orbicularis muscle laxity
 - Approach allows for skin removal and tightening of loose muscle and skin
 - Transconjunctival – younger patient with smooth skin, moderate fat pseudo herniation, and no orbicularis laxity
 - Young patients with early signs of baggy lids with minimal skin redundancy
 - Laser resurfacing has expanded indications for transconjunctival approach
 - Good for patients who don't want external scar or heal by hypertrophic scarring

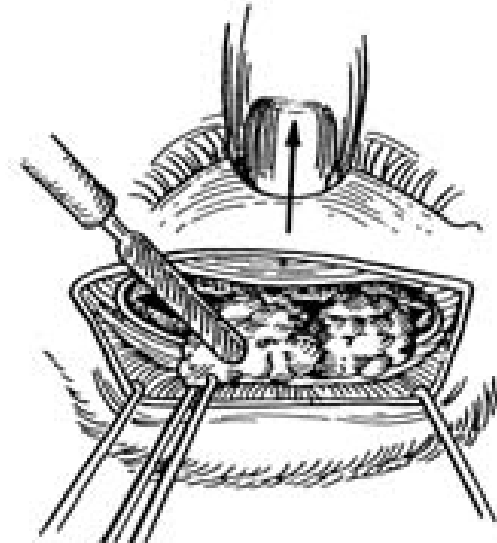
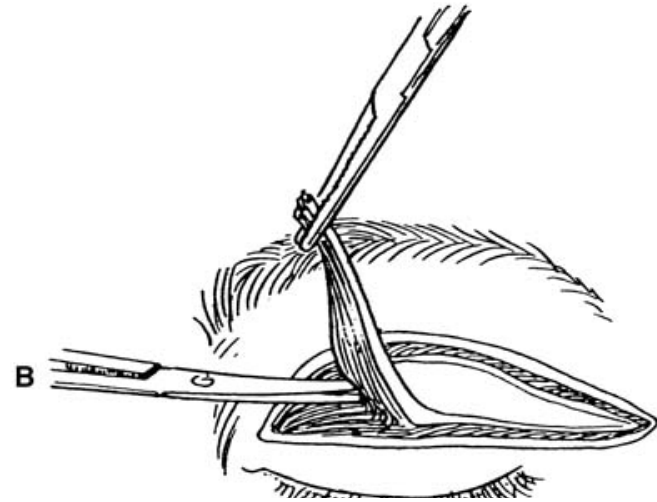
Upper lid blepharoplasty

- Amount of skin excision allows for cosmetic enhancement but not lagophthalmos



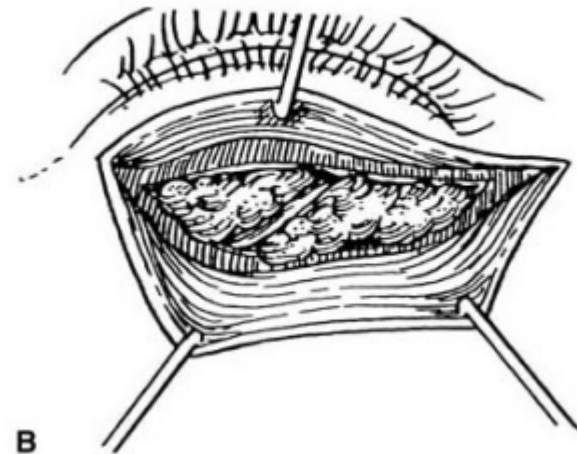
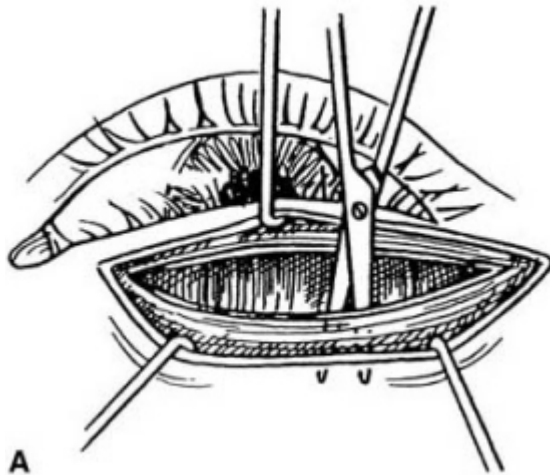
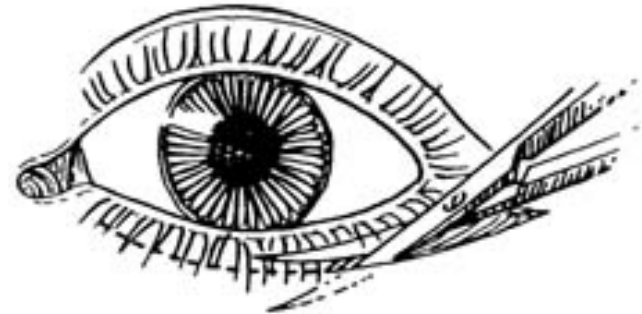
Upper lid blepharoplasty

- Only fat that easily flows into the wound is removed
- Central and medial fat compartments separated by the superior oblique muscle – rarely observed but look for it when clamping off fat to excise
- Address ptotic lacrimal gland if seen – suture gland capsule to periosteum of orbital roof



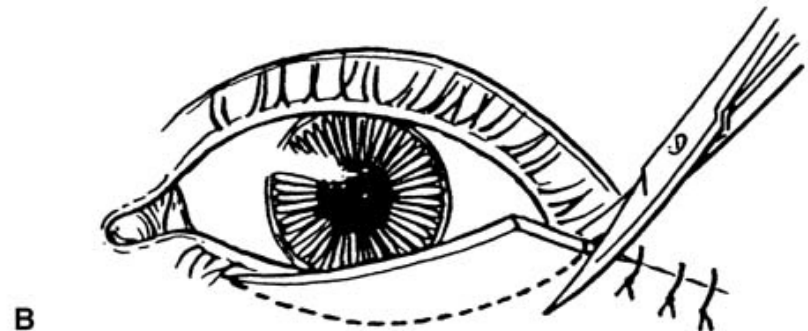
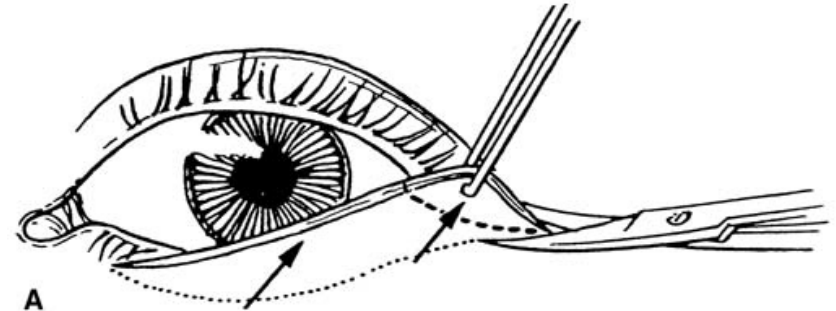
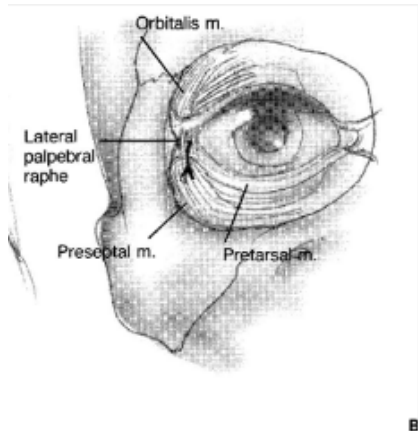
Lower Lid: Subciliary approach

- Lower lid incision made 2.5mm below the lid margin in the subciliary crease
- Initial incision through the skin and a small skin flap is developed for 3mm to expose and preserve the pretarsal fibers of the orbicularis
 - By preserving this pretarsal sling, the lid will have more tension postop and reduce scleral show and ectropion
- Before clamping the medial fat compartment, look for inferior oblique muscle which is almost always observed



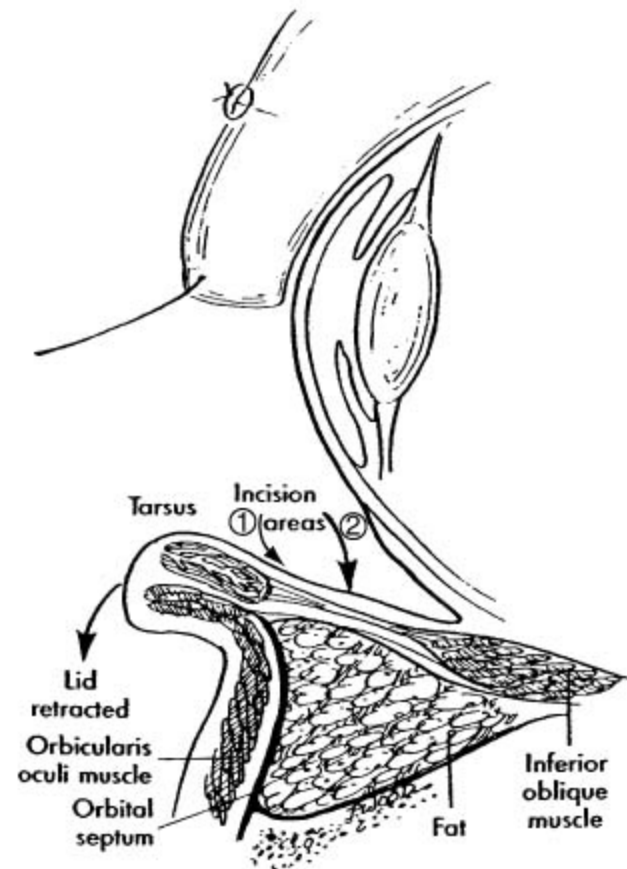
Lower lid: Subciliary approach

- Skin excision is done while the patient is looking upward with the mouth open
- Lid suspension suture is used to allow further excision of skin, to prevent scleral show and to draw the lateral skin upward
 - Suture between the lateral orbicularis oculi muscle in the skin muscle flap and the lateral orbital periosteum; suture is placed vertically



Lower lid: Transconjunctival approach

- **Preseptal approach:** involves a transconjunctival incision made at the inferior margin of the tarsal plate
- **Postseptal approach** a single incision placed 4 mm below the inferior tarsal margin and directly through the conjunctiva and lower eyelid retractors to expose orbital fat from the posterior aspect. The orbital septum is maintained completely intact



Lower lid: Transconjunctival approach



Post op care

- Cold compresses
- Antibiotic ointment
- Avoid looking down for 24hrs
 - Downward gaze could allow the skin-muscle flap to slide inferiorly over the underlying septum
- Eye makeup POD6
- Mild physical activities POD10
- Contact lenses POD9-10

Complications

- **Hematoma**
 - Reopen wound, cauterized
 - Ecchymosis soft, hematoma firm
- **Subconjunctival ecchymosis**
 - Resolves in 3wks
- **Chemosis**
 - Resolves within in days or lasts up to 6 wks
 - Temporary; can use steroid drops if lasts beyond 2wks
- **Lagophthalmos**
 - Common after upper lid surgery esp post op due to edema and orbicularis paresis
 - If lasts 6-8wks will likely require surgical correction
- **Ectropion**
 - Too-generous skin excision after lower lid surgery
 - Horizontal lid laxity not addressed – horizontal lid shortenin procedure
- **Entropion**
- **Epiphora**
- **Poor scars**
- **Loss of vision**