Cosmetic Eyelid Surgery Part 1

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No Financial Disclosures







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Outline

- Periorbital Anatomy
- Upper Blepharoplasty
- Eyebrow and Forehead Lift
- Lower Blepharoplasty
- HA Filler and Fat Transfer
- Case Studies

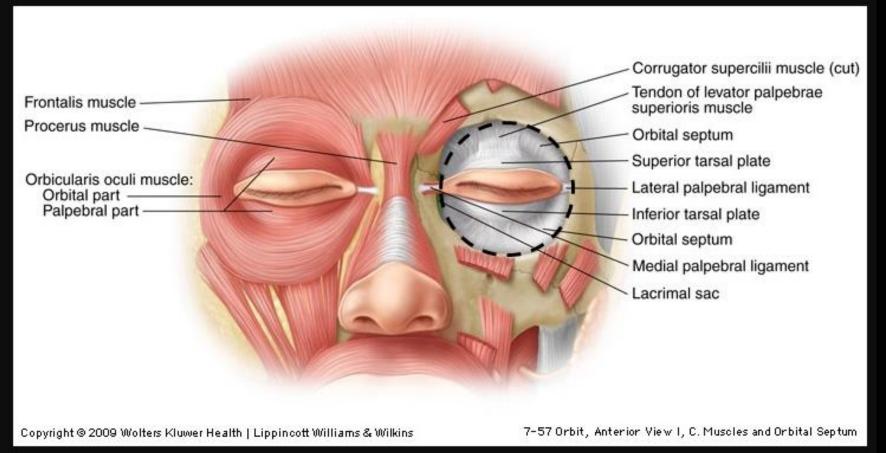


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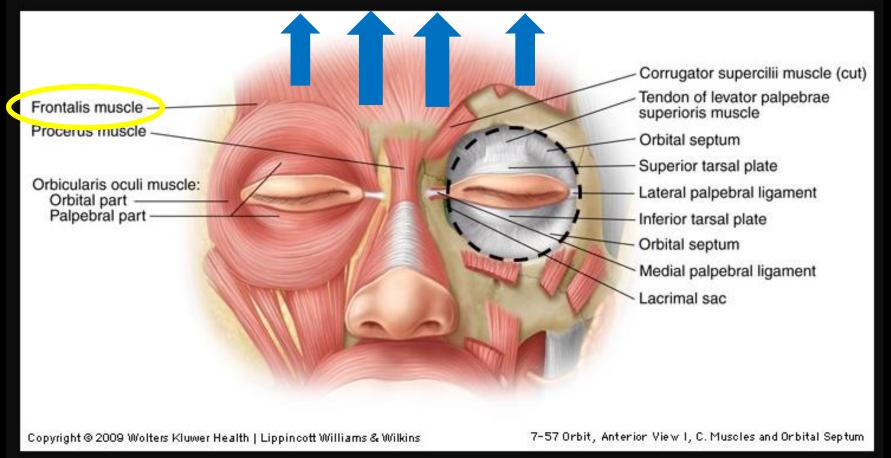


Periorbital Anatomy



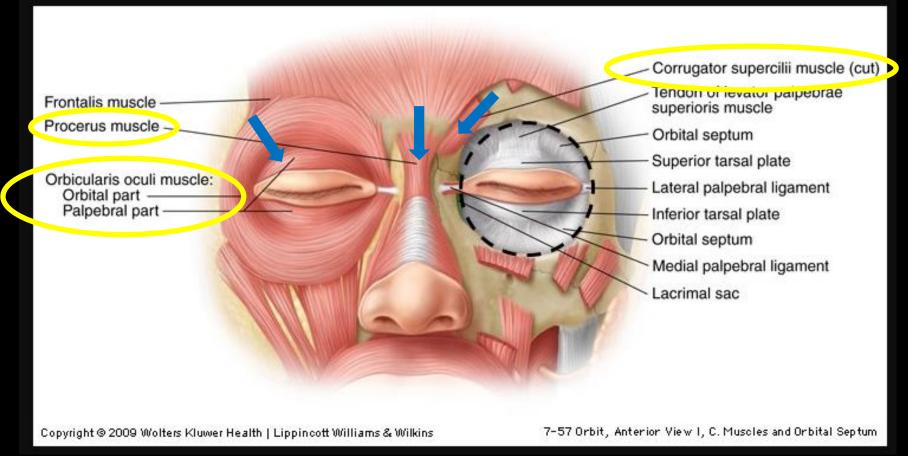


Brow Elevators





Brow Depressors





"Chemical Brow Lift"





XX

X

XX

X



Avoid THIS!





CAUT

The "Spocked" Brow

Medial Brow Anatomy

- Corrugator is
 DEEP to the frontalis mediall
- Botox injected superficially in t area
 → frontalis
- Botox injected d
 → corrugator



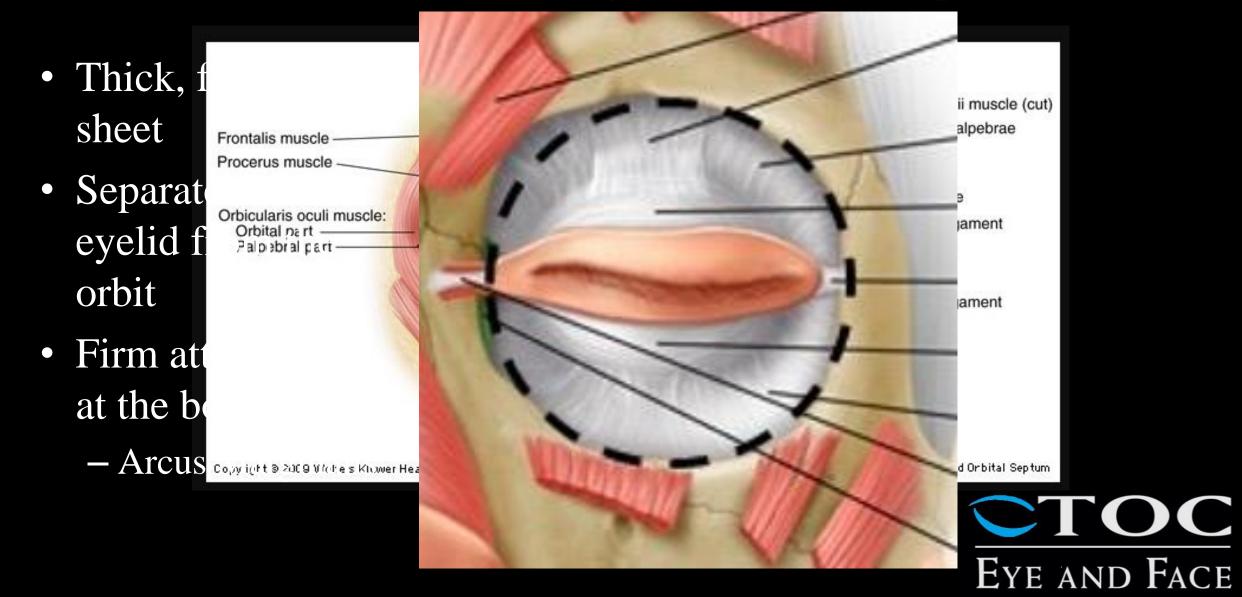
Anatomy – Lateral Corrugator

- Laterally, becomes more superficial
- Interdigitates with the frontalis muscle
- Botox can be injected more superficially →
 BUT also likely to weaken frontalis



EVE AND FACE

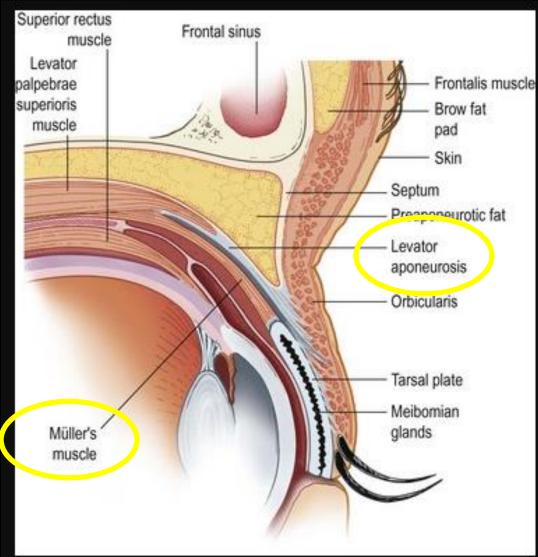
Periorbital Anatomy – Orbital Septum



Upper Eyelid Anatomy

Levator

- Located
 beneath
 preaponeurotic
 fat behind the
 orbital septum
- Innervated by CN3



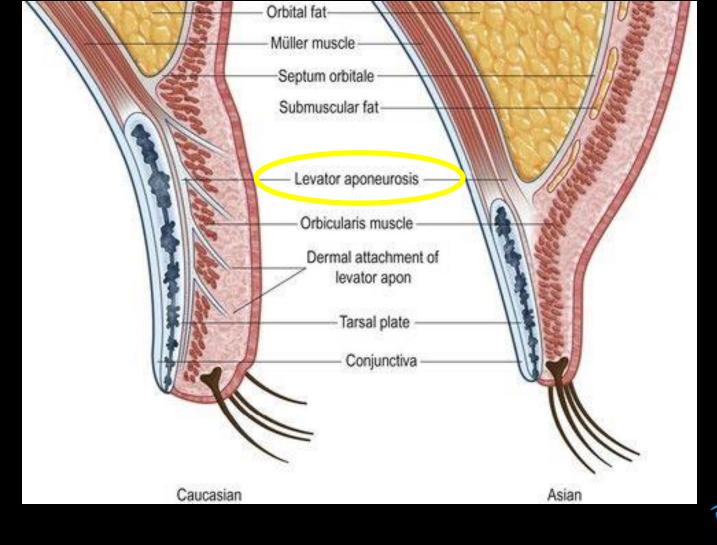
Müller's

- Located posteriorly adjacent to the conjunctiva
- Autonomically innervated

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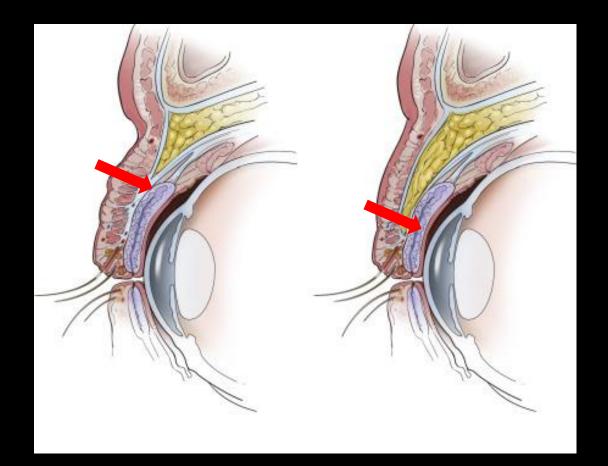
Nerad JA. Techniques in Ophthalmic Plastic Surgery: A Personal Tutorial. 1st ed. Philadelphia: Elsevier Health Sciences; 2009. Chapter 2, Clinical Anatomy, Fig 2.21, p.41.

How does the eyelid crease form?



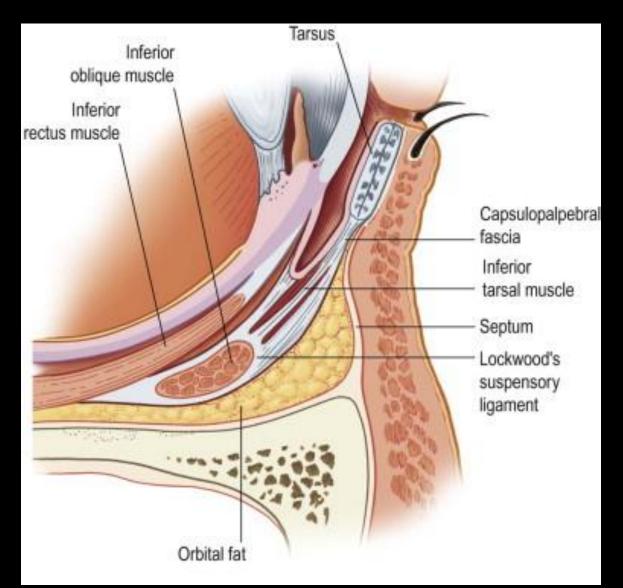
EVE AND FACE

Variations in Upper Eyelid Crease





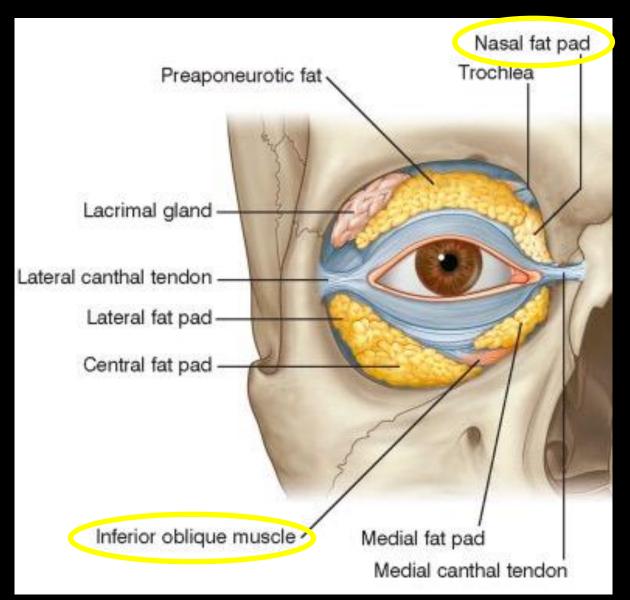
Lower Eyelid Anatomy



Nerad JA. Techniques in Ophthalmic Plastic Surgery: A Personal Tutorial. 1st ed. Philadelphia: Elsevier Health Sciences; 2009. Chapter 2, Clinical Anatomy, Fig 2.28, p.43.

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Orbital Fat Pads



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Pre-Operative Evaluation

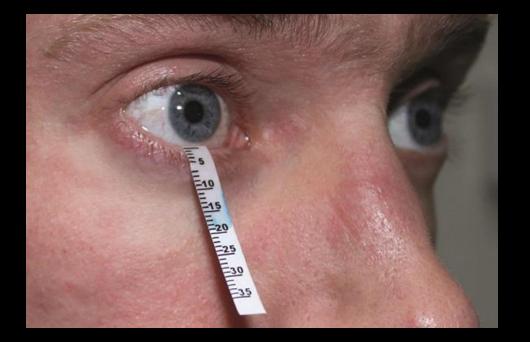
- Medical history (thyroid dysfunction, myasthenia gravis, etc)
- Medications (aspirin, other anticoagulants/antiplatelet agents)
- Prior eye problems (*dry eye*)
 - Burning
 - Tearing
 - Foreign body sensation
- Prior eye surgery (ie LASIK may be predisposed to dry eye)

 \mathbf{OC}

Eye and Face

• Prior eyelid surgery

Pre-Operative Dry Eye Screening





EVE AND FACE



Test Vision



Card is held in good light 14 inches from eye. Record vision for each eye separately with and without glasses. Presbyopic patients should read thru bifocal segment. Check myopes with glasses only.



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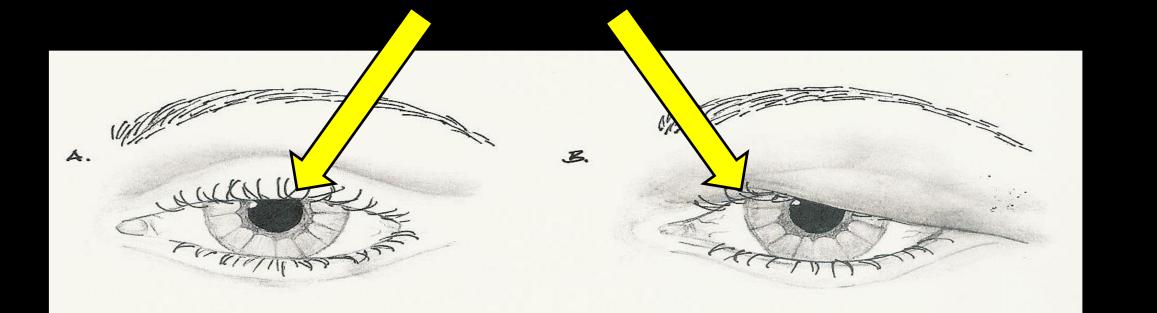
The Triple Threat

Dermatochalasis = extra skin Ptosis = droopy muscle Brow Ptosis = eyebrow droop



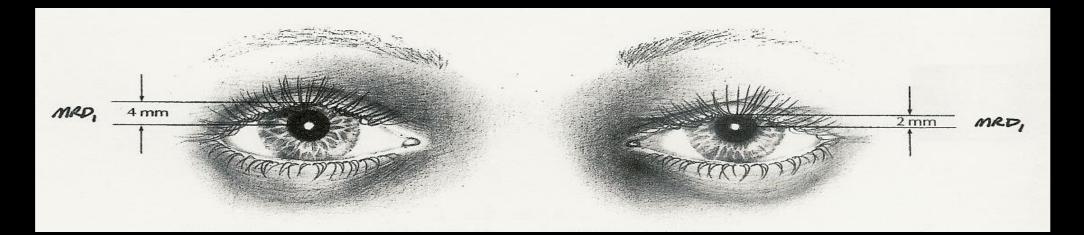
"I have droopy eyelids"

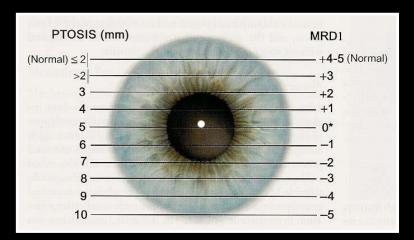
• Differentiate true ptosis from *pseudoptosis* due to dermatochalasis





Margin Reflex Distance (MRD or MRD₁)

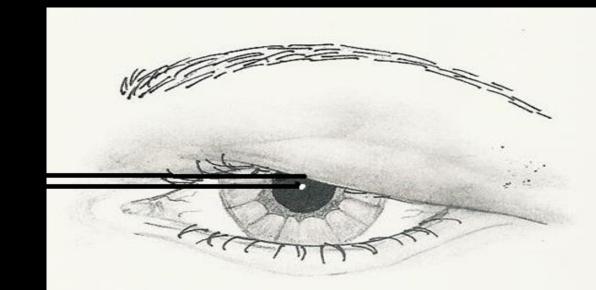




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Why "MRD1" is Important....INSURANCE!

Medicare and Private Insurance Carriers use MRD1 when determining approval for surgery



Eye and Face



Photographs

Frontal

Oblique or ³/₄ View



"Awning Effect"





























Post Operative Lagophthalmos - Management

- Lubrication!!!
 - Artificial tears
 - Gel drops
 - Ointment
- Downward massage of the eyelid
- Consider release of upper eyelid retractors if ptosis performed
- Consider skin graft if true deficiency of anterior lamella



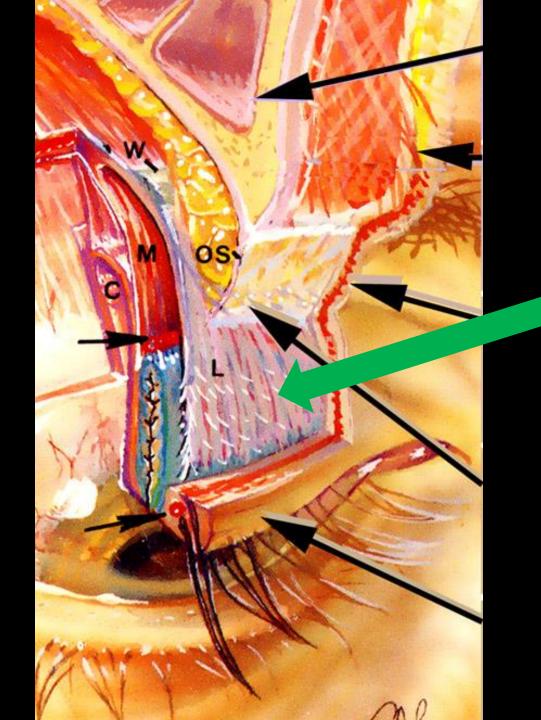
Unrecognized Ptosis



Anterior versus Posterior Approach to Ptosis Repair

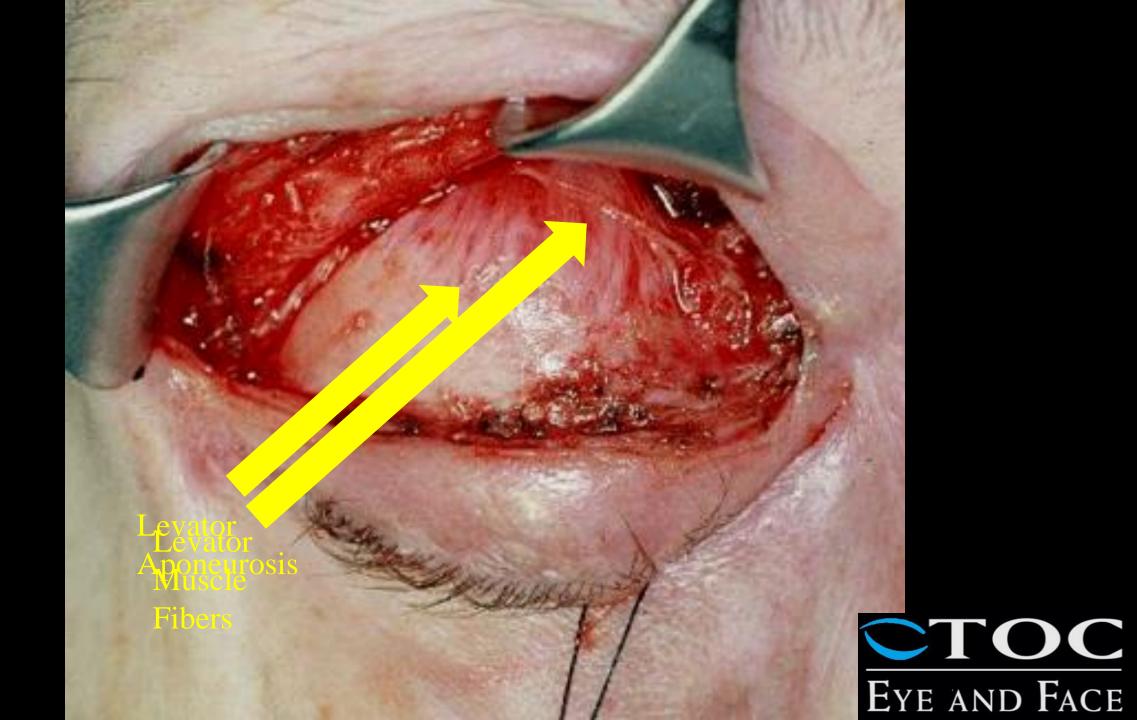


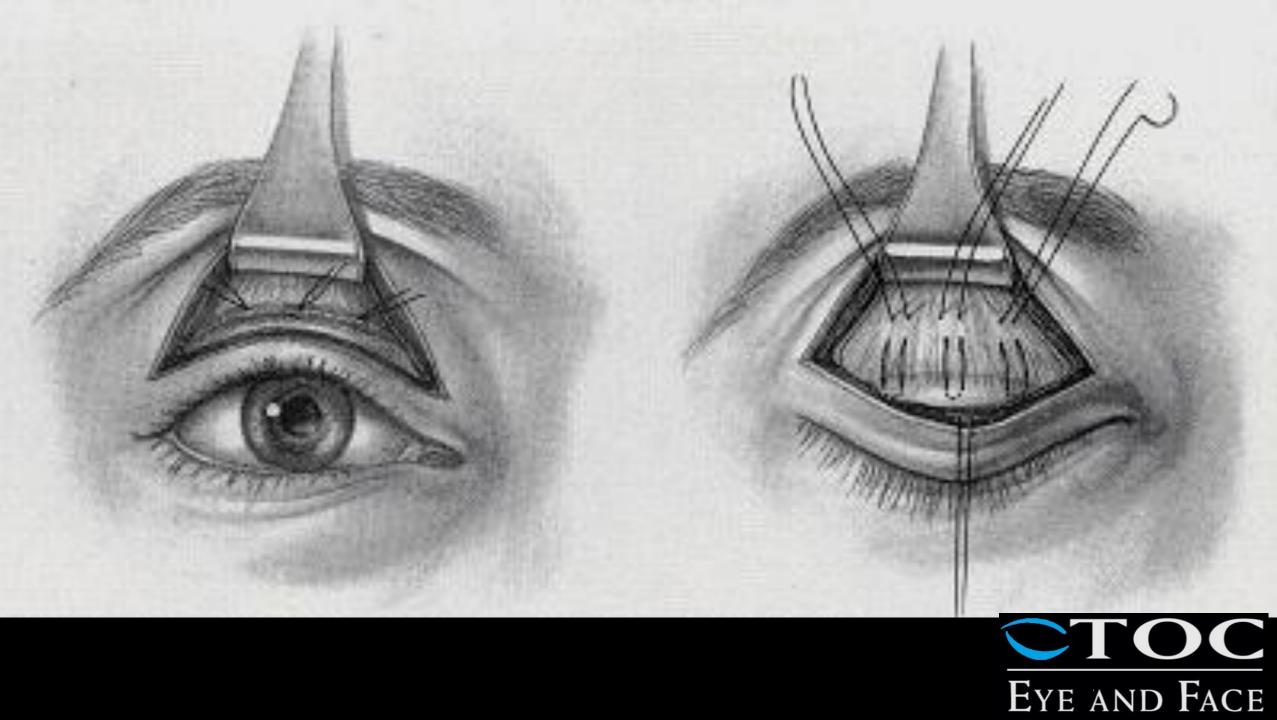
Anterior Approach



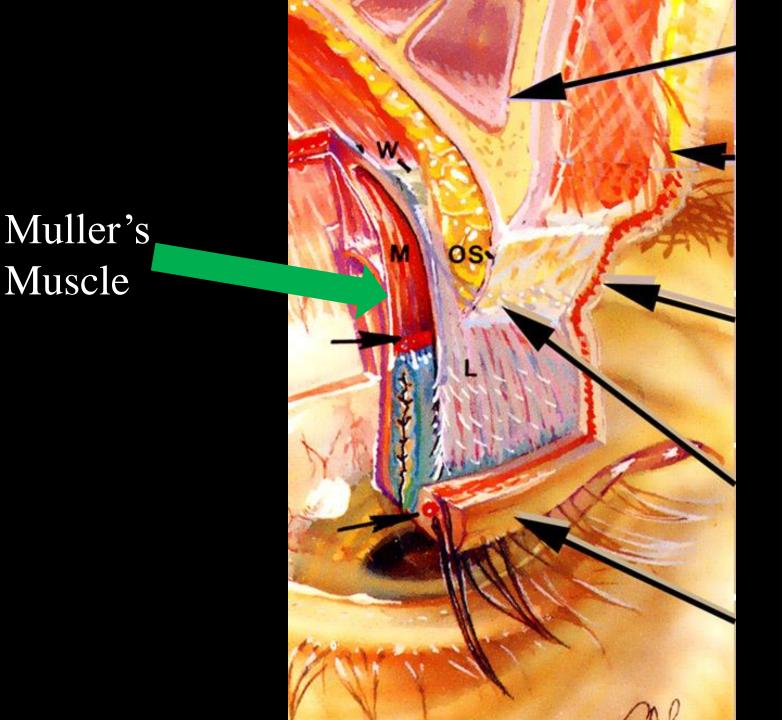
Levator Aponeurosis

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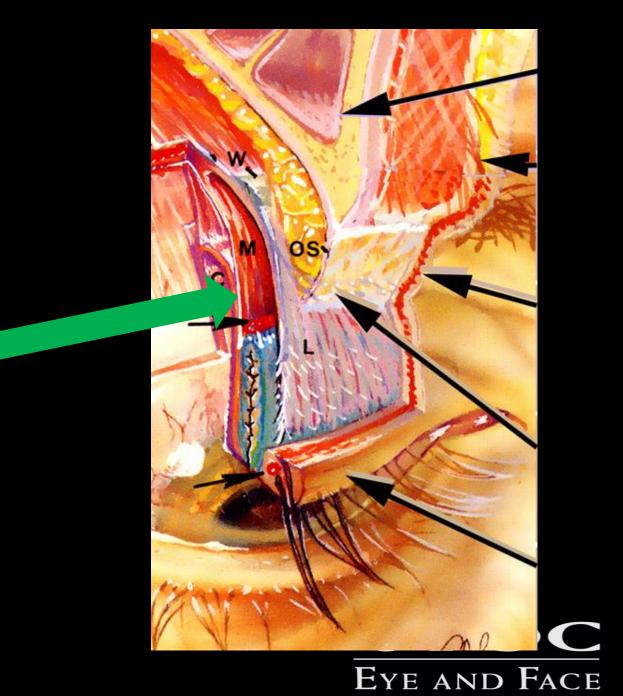
Muscle

Posterior Approach

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$\underline{\alpha}$ adrenergic agonist

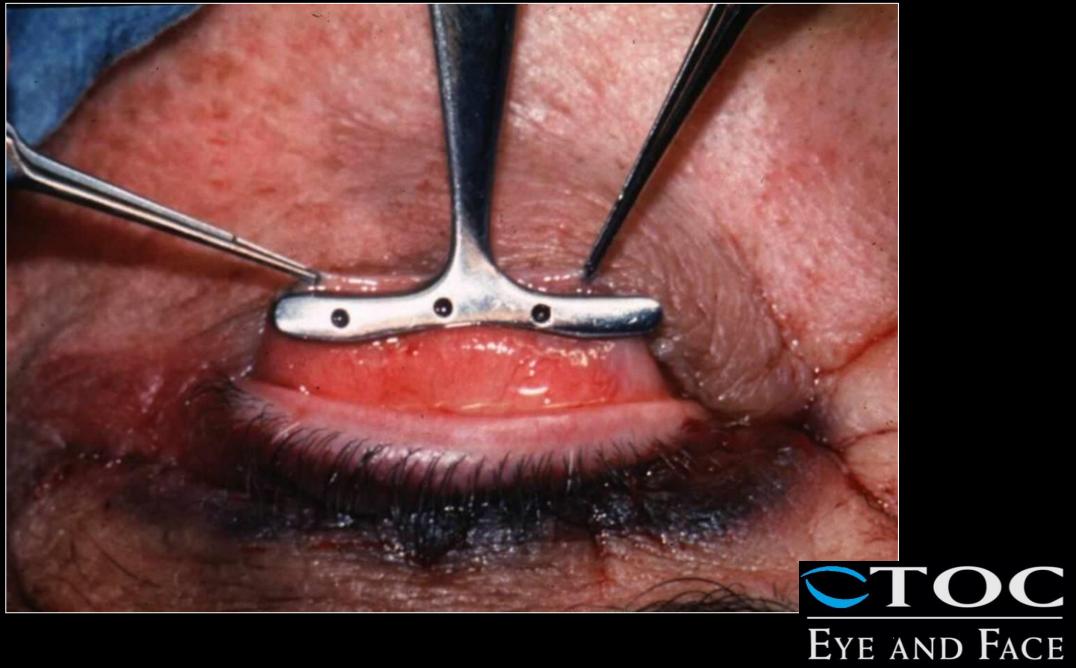


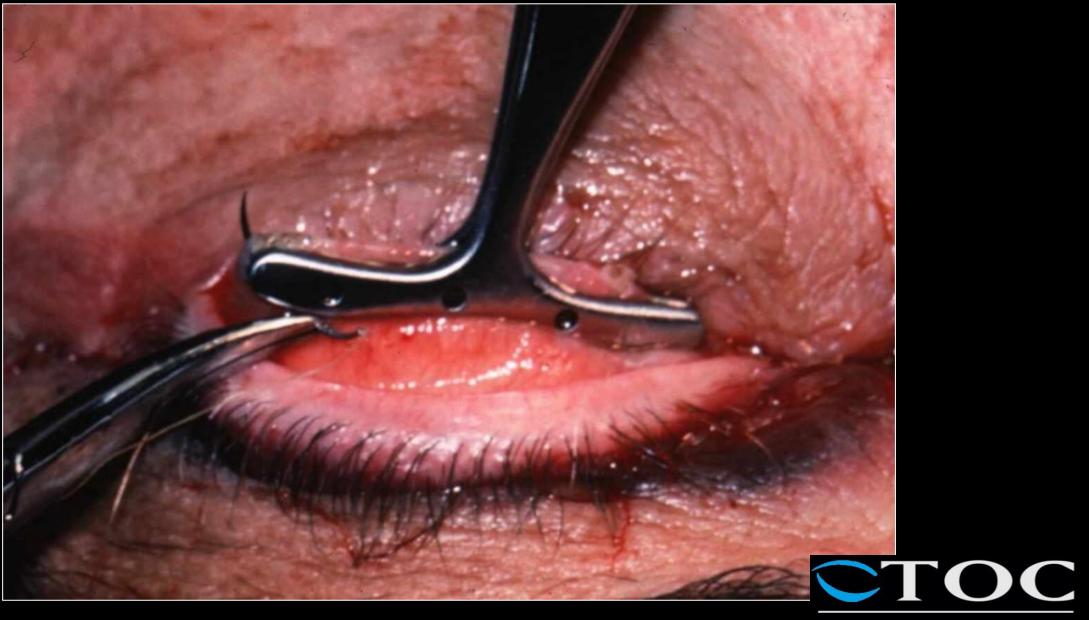


Putterman Ptosis Clamp

CE

ARTITUT





Eye and Face



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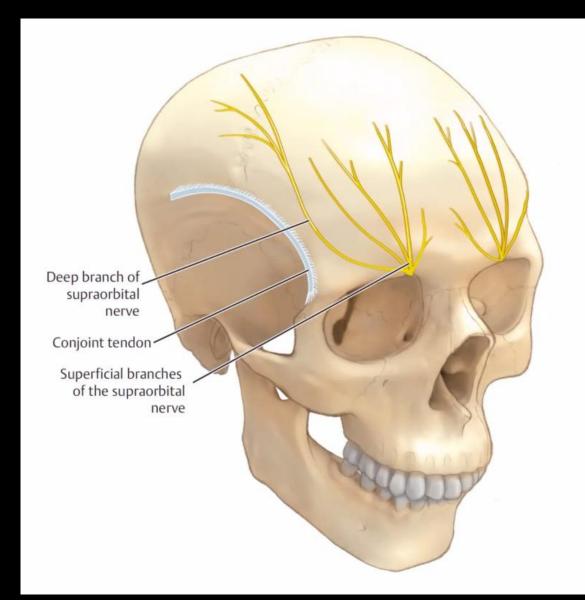


"I have droopy eyelids"

Brow Ptosis

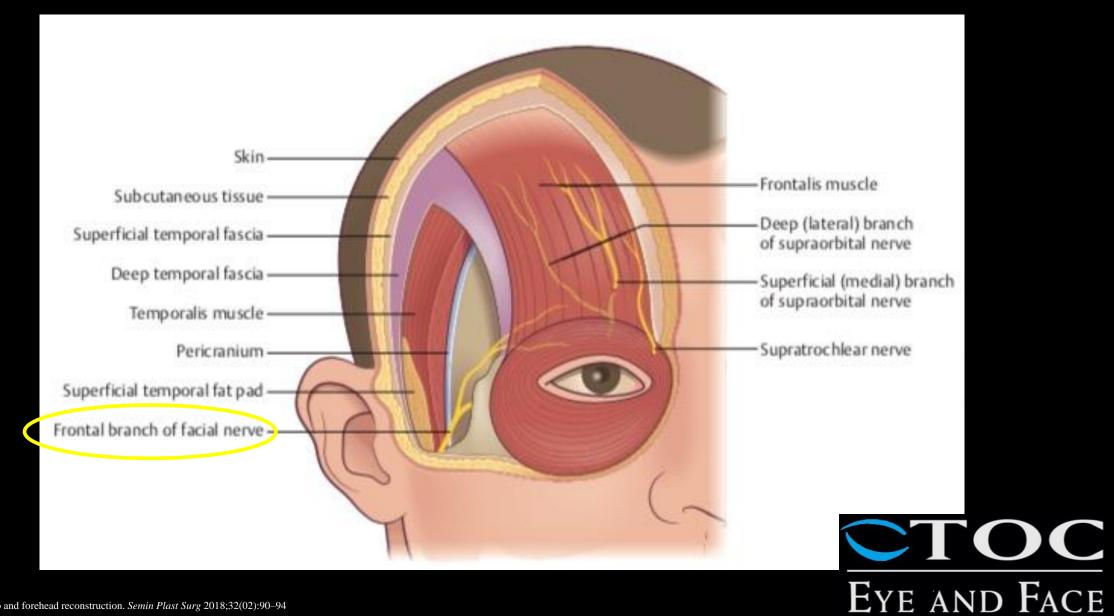


Forehead Anatomy



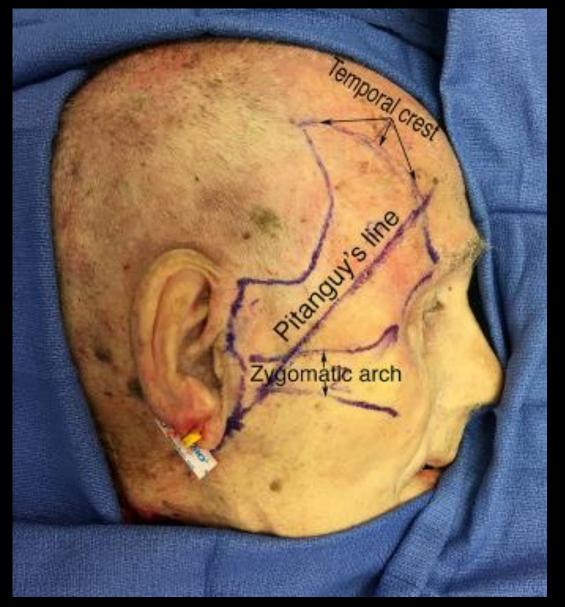
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Forehead Anatomy



Sokoya M, Inman J, Ducic Y. Scalp and forehead reconstruction. Semin Plast Surg 2018;32(02):90-94

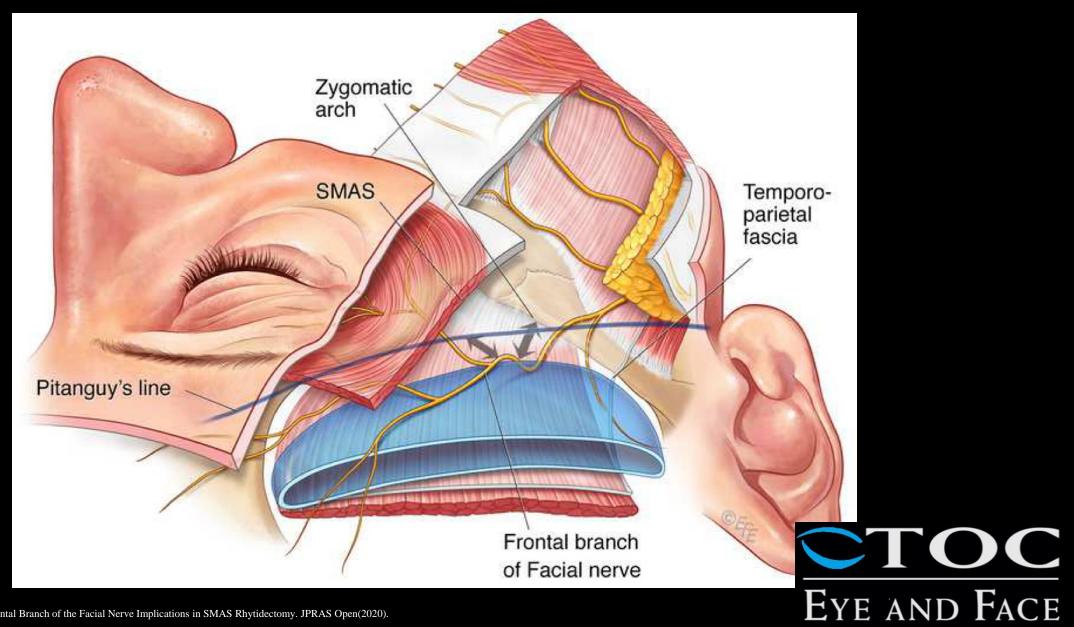
Pitanguy's Line



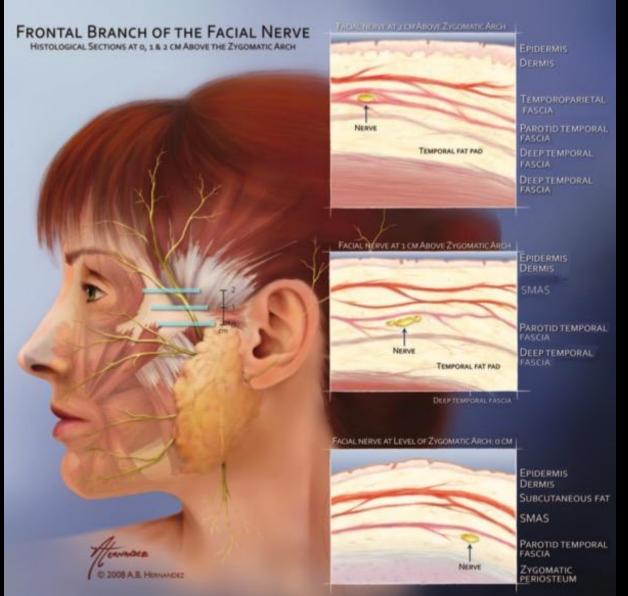
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Pankratz, J, et al. Depth Transitions of the Frontal Branch of the Facial Nerve Implications in SMAS Rhytidectomy. JPRAS Open(2020).

Pitanguy's Line



Temple Anatomy



Trussler, et al. The Frontal Branch of the Facial Nerve across the Zygomatic Arch: Anatomical Relevance of the High-SMAS Technique. Plast Reconstr Surg. 2010 Apr;125(4):1221-9.

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Central Dissection



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Full Midface Release



Options for Fixation

- EndotineTM
- Lactosorb ScrewsTM
- Bone Tunnels





Bone Tunnel Fixation



Brow Lift Complications

- Etiology \rightarrow Cautery, Traction, Dissection
- Alopecia
- Sensory 6.2%
 - Dysesthesia
 - Neurogenic Itching
 - Consider: Elavil, Neurotin, Lyrica
- Motor 1.5%
 - Typically, frontal branch of the facial nerve
 - Consider post-operative steroid (oral vs injection)





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