Facial Cosmetic Surgery

Ryan Diepenbrock, DDS,FAACS Diplomate, American Board of Facial Cosmetic Surgery Diplomate, American Board of Oral and Maxillofacial Surgery Fellow American Academy of Cosmetic Surgery

Board of Directors, Cosmetic Surgery Foundation



#### DIEPENBROCK FACIAL COSMETIC SURGERY



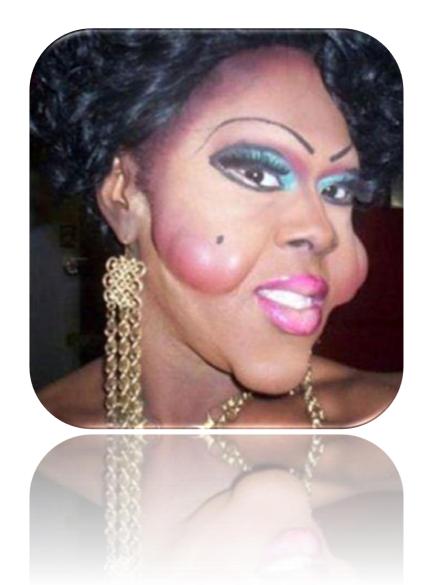
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#### Renewedlook.com



## Patient Evaluation

- What is your Chief Complaint?
- How did you hear about us?
- What are your expectations?
- Have you ever had cosmetic surgery ?
- Have you ever had surgery?
- Who is going to take care of you after surgery?
- Do you have any upcoming engagements?
- Do you have any medical conditions?
- Do you take any medications?
- Do you use herbal medications?

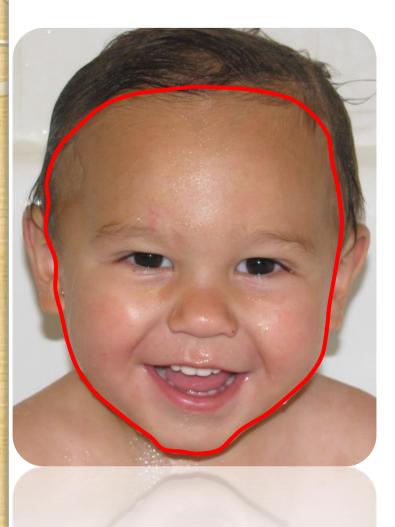


# WARNING

- Patient has unrealistic expectations
- Brings in photos
- Says "I want to look like...."
- Constantly talks negatively about other surgeons
- Constantly compliments you and your work
- Is rude to your staff
- Lies on health history/past surgical history
- Wants "guaranteed results"



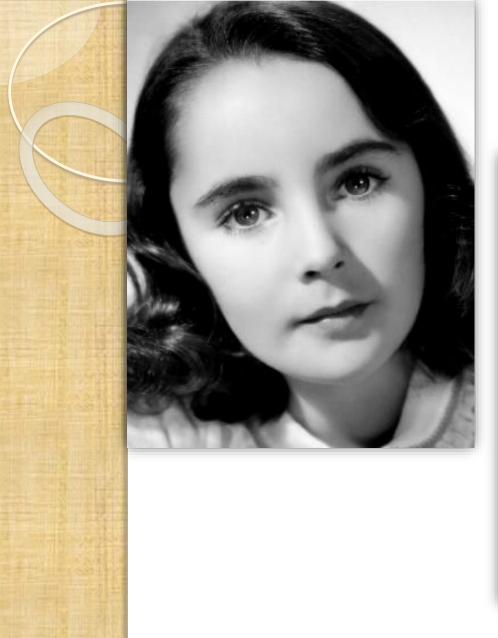
The Aging Face























## Four "R" of Facial Rejuvenation

- Relax muscles neuro-modulators
- **Replenish** volume fillers, fat, implants
- Resurface skin lasers, peels, micro-needling, lasers, RF devices, cosmeceuticals
- Redrape tissues facelift, brow lift, blepharoplasty, etc
- Minimally invasive modalities are useful in younger patients with early changes
- More invasive surgical procedures needed with advanced aging

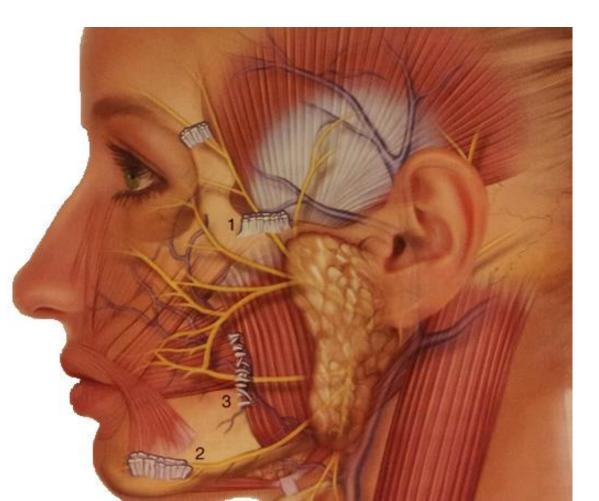
#### Facial Retaining Ligaments

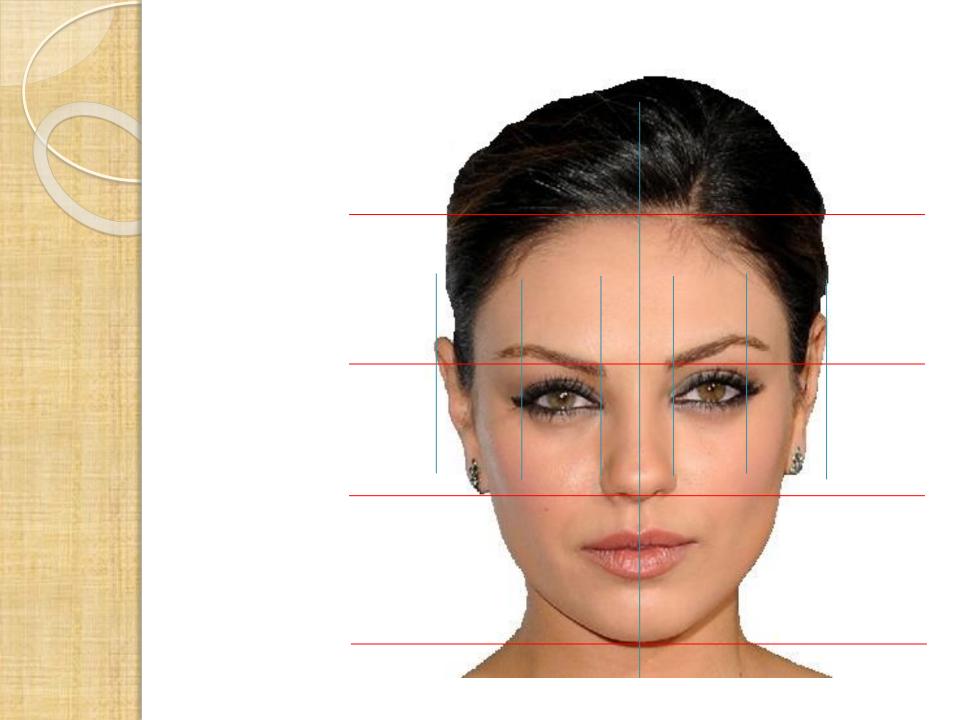
Osseocutaneous: fibrous bands with osseous (periosteal) origins and dermal insertions

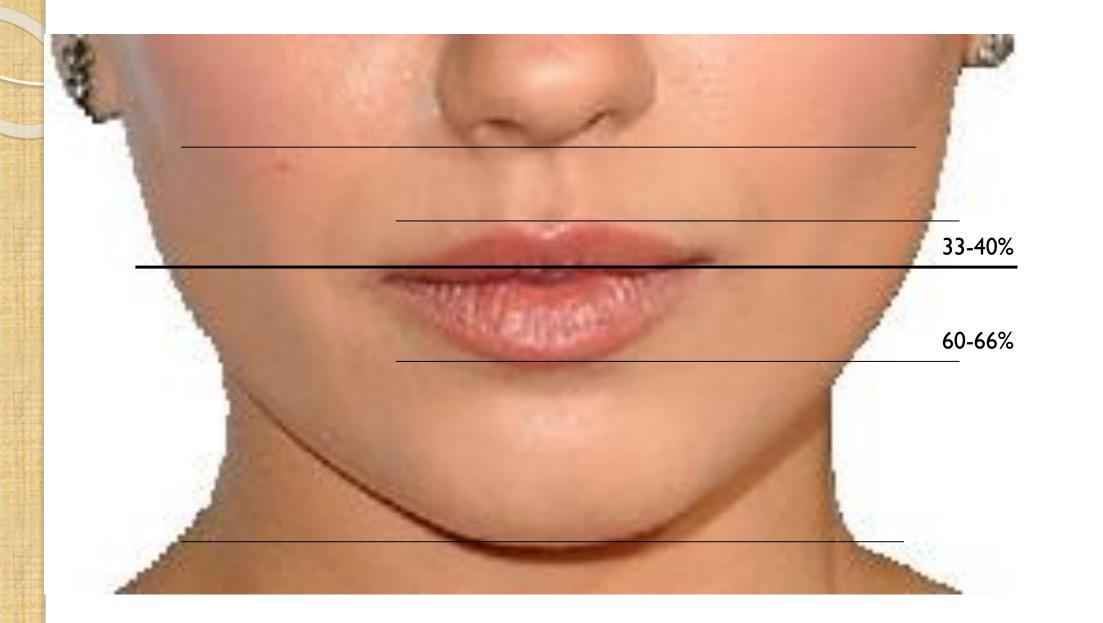
- Zygomatic
- Mandibular

Soft tissue-to-soft tissue ligaments: Coalescence of superfical and deep fasciae

- Parotid
- Masseteric
- Zygomaticus minor
- Zygomaticus major
- Masseteric
- Risorius









Lower 1/3rd

Upper lip 1-2mm anterior

Lower lip At perpendicular line

Chin 2mm posterior



Facial Analysis

Trichion- frontal hairline

Glabella- most prominent point of midsagittal forehead

Radix- root of nose

Rhinion- junction of bony and cartilaginous nasal dorsum Nasal Tip-anteriormost projection of nasal tip

Alar crease- lateral aspect of nasal ala

Subnasale- junction of columella and upper lip at base of nose

**Stomion**- where lips meet

**Pogonion**- most anterior aspect of chin

Menton- lower border of contour of chin

Gnathion- point at junction of tangents to menton and pogonion

**Cervical point-** point at junction of tangents to menton and anterior border of neck

### Upper 1/3rd

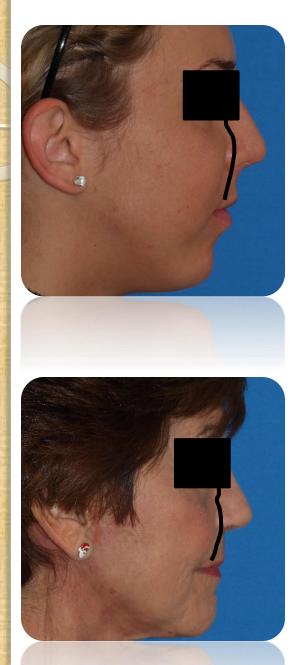


Ptosis Rhytids II's Lateral hooding Fat atrophy Fat herniation Saggy eyelids Sun damage





#### Míddle 1/3rd



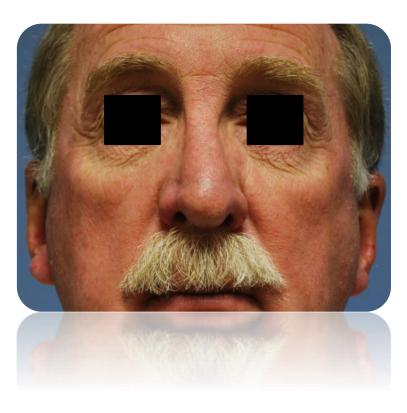
Loss of orbicularis oculi tone

Descent of malar soft tissue

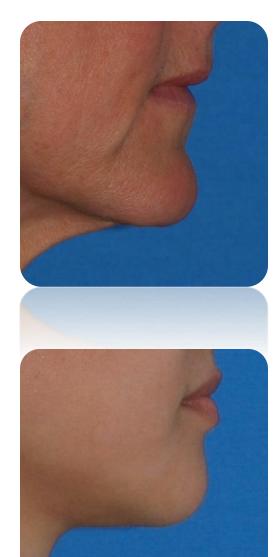
Fat pseudoherniation

Deepened nasolabial fold

Medial and lateral canthal tendon laxity



#### Lower Facial 1/3rd

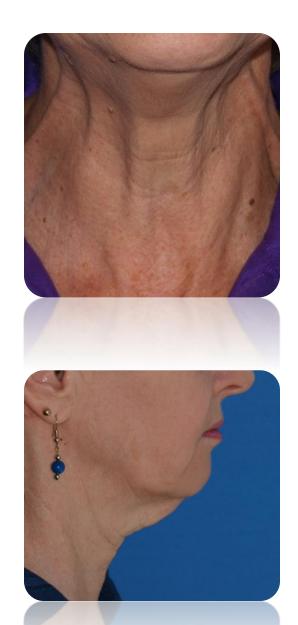


Perioral: Marionette lines, downward turned lips, loss of muscle tone, atrophy of lip elevators, depressors, modiolus

Jowls: Dehiscence of mandibular septum into submandibular compartment

Chin: Mentalis atrophy, skin changes, loss of VDO

Neck/Submental: Platysmal dehiscence, fat atrophy, dehiscence of mandibular septum



#### Upper 1/3 and Períorbítal Rejuvenation

- •Analysis
- •Patient evaluation
- •Surgical procedures
- •Non-surgical procedures
- •Complications

#### Conditions

Hair loss (androgenic allopecia) High forehead Low forehead Brow ptosis Dermatochalasis (upper and lower eyelid) Fat herniation Rhytids Solar damage

Epicranial aponeurosis (galea aponeurotica)

Frontal belly of occipitofrontalis (epicranius) muscle

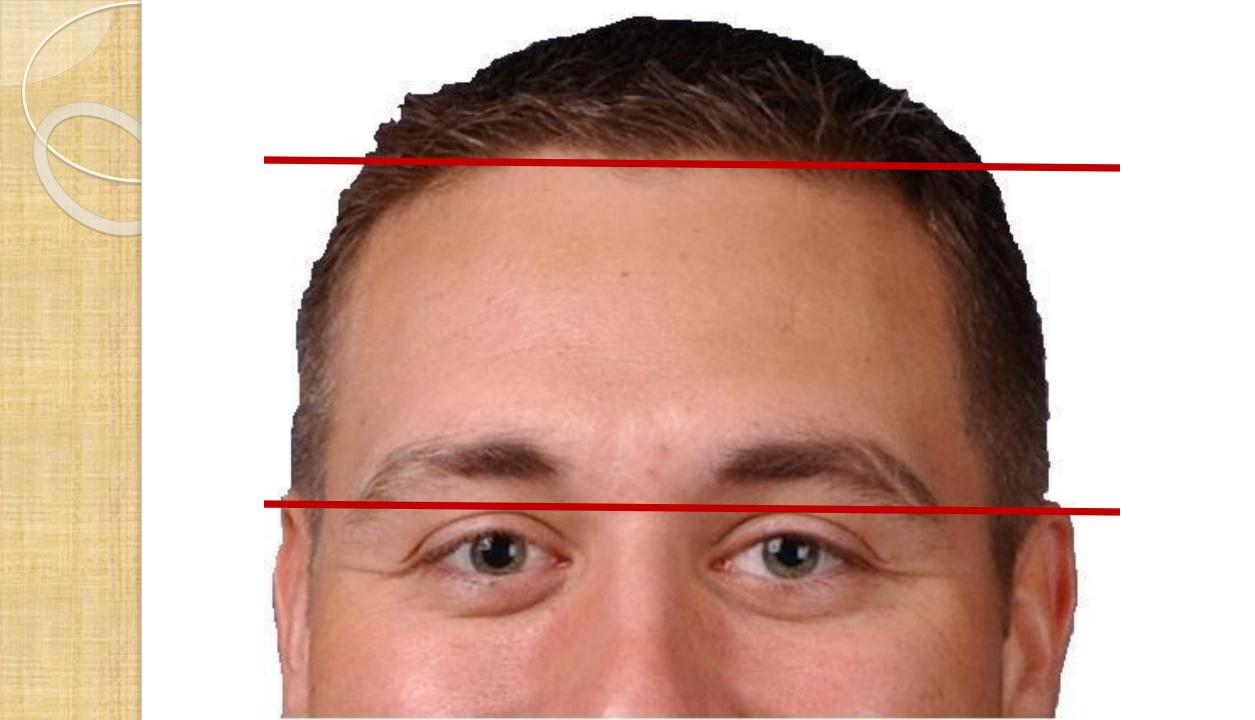
Procerus muscle Corrugator supercilii muscle Orbital part of orbicularis oculi muscles

> Palpebral part of orbicularis of oculi muscles

Levator labii superioris alaeque nasi muscle

Transverse part of nasalis muscle Levator labii superioris muscle Auricularis anterior muscle Zygomaticus minor muscle

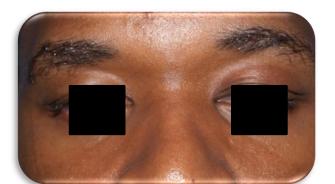
---- Alar part of nasalis muscle





#### Ptosis Rhytids II's Lateral hooding Fat atrophy Fat herniation Dermatochalasis Dyschromias

Upper 3rd







#### Brow Exam

- Brow ptosis, symmetry
- Visual Field Defects
- Lateral hooding
- Measurements:
  - Central upper lid margin to central inferior brow edge = 10 mm or more
  - Female: Highest point of brow 10-12mm above supraorbital rim
  - Male: at or 1-2mm above supraorbital rim



#### Procedures

- Hair transplant
- Forehead shortening
- Browlift (multiple techniques)
- Upper lid blepharoplasty
- Lower lid blepharoplasty
- CO2 laser skin resurfacing
- Chemical peel
- Neurotoxins
- Fillers
- Fat grafting

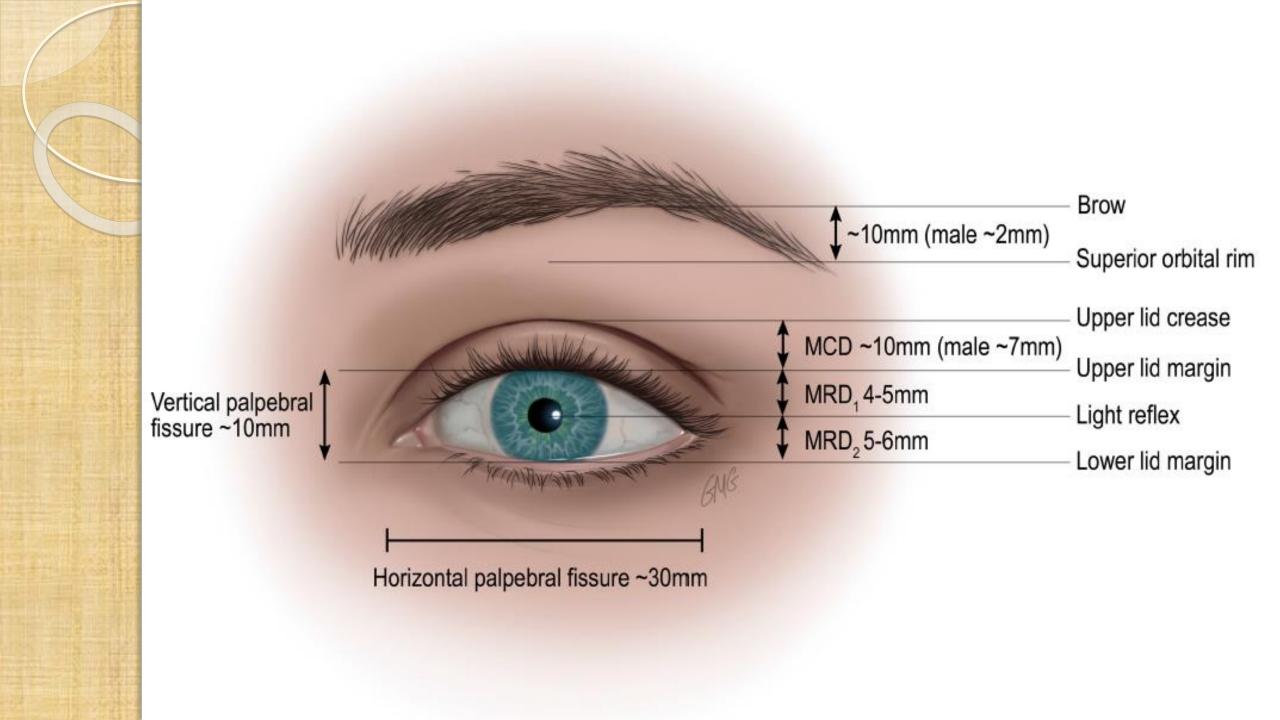
Upper Eyelid Exam

- Evaluate excess skin (dermatochalasis)
- Herniated/pseudoherniated fat (steatoblepharon)
- Skin quality
- Tissue edema (blepharochalasis)
- Obicularis Occuli hypertrophy
- Lid ptosis (MRD1; MRD2)
- Xeropthalmia
- Visual Field Defects
- Previous Surgery









#### Lower Eyelid

- Evaluate excess skin (dermatochalasis)
- Herniated/pseudoherniated fat (steatoblepharon)
- Skin quality
- Tissue edema (blepharochalasis)
- Obicularis Occuli hypertrophy
- Lid retraction (MRD2); excessive scleral show
- Obicularis muscle hypertrophy
- Ectropion/Entropion
- Lower eyelid laxity
  - Distraction test (<7mm)
  - Snap test (1 sec)
  - Pull test ( does punctum move?)
  - Scleral show
  - Bell's Phenomenon



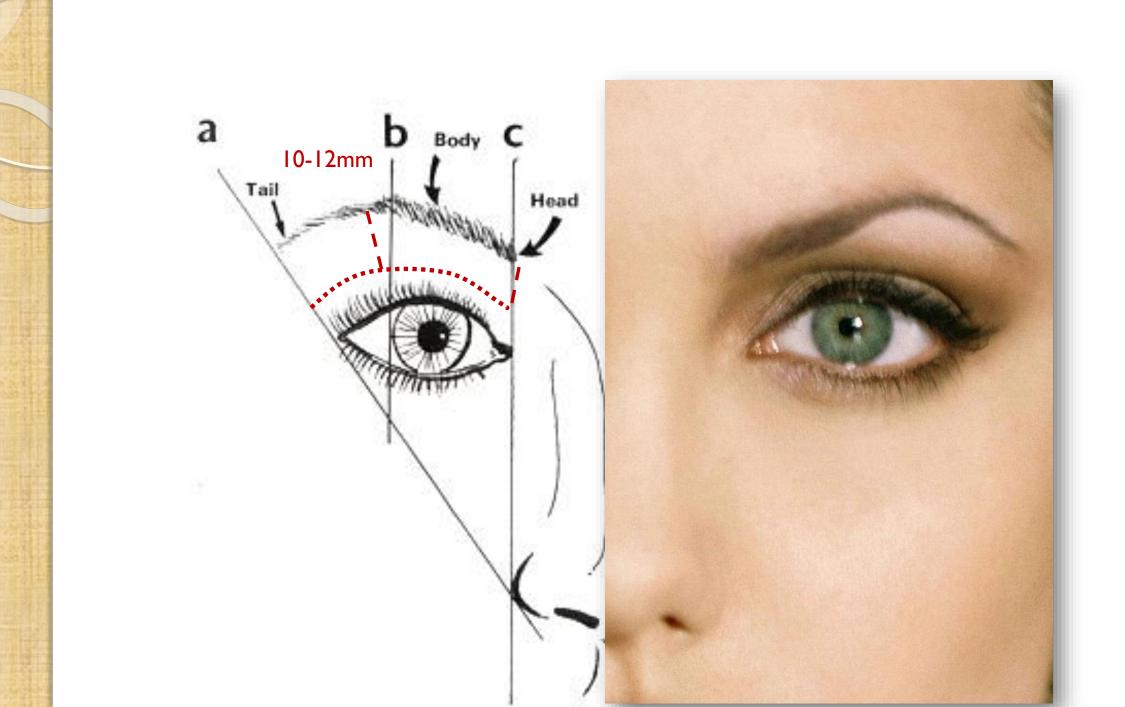




# **BROW and LID POSITION** Female Male





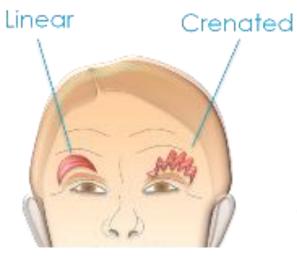


## Browlift

- Endoscopic
- Tricophytic
- Pretricophytic
- Direct
- Coronal
- Brow pexy
- Chemical



Browlift

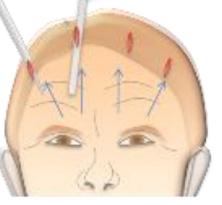


<u>Direct</u> A certain amount of skin is removed above the brow. The incision can be either linear or crenated (see above).



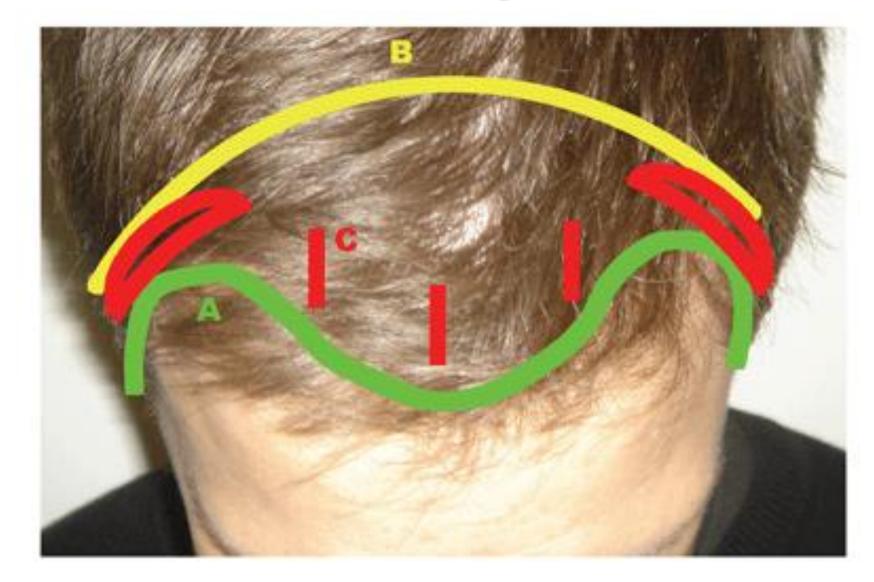
Pretrichial Incision The incision and skin removal is performed at the hairline, minimising visible scarring.

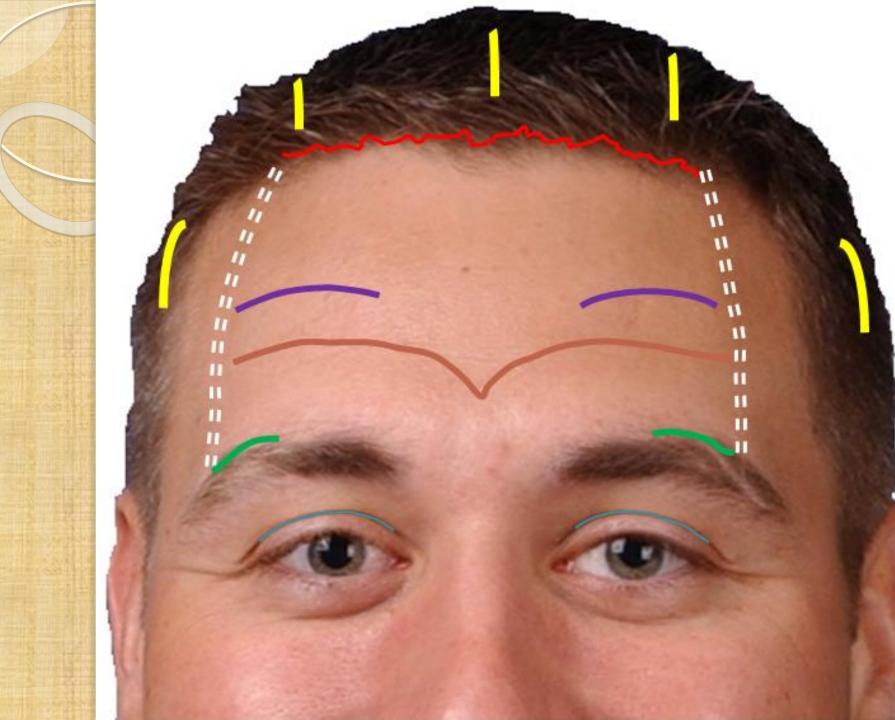
#### \_ Endoscope



Endoscopic Several small incisions are made behind the hair line. The forehead is then lifted and sutured, leaving small, well hidden scars.

Browlift





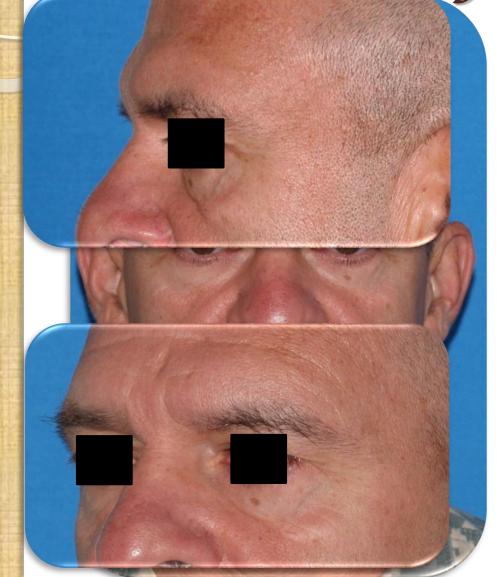
Trichophytic Brow Lift: DirectiBicowoEistcin at least

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- Endoscopic Blog and car
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- El mant and the storroom
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- Mistigeostalareextreme laterallhooding
  - Lengthens forehead

### Direct Browlift



#### Indirect Browlift (Brow Pexy) and Upper Blephs







Trichophytic Browlift



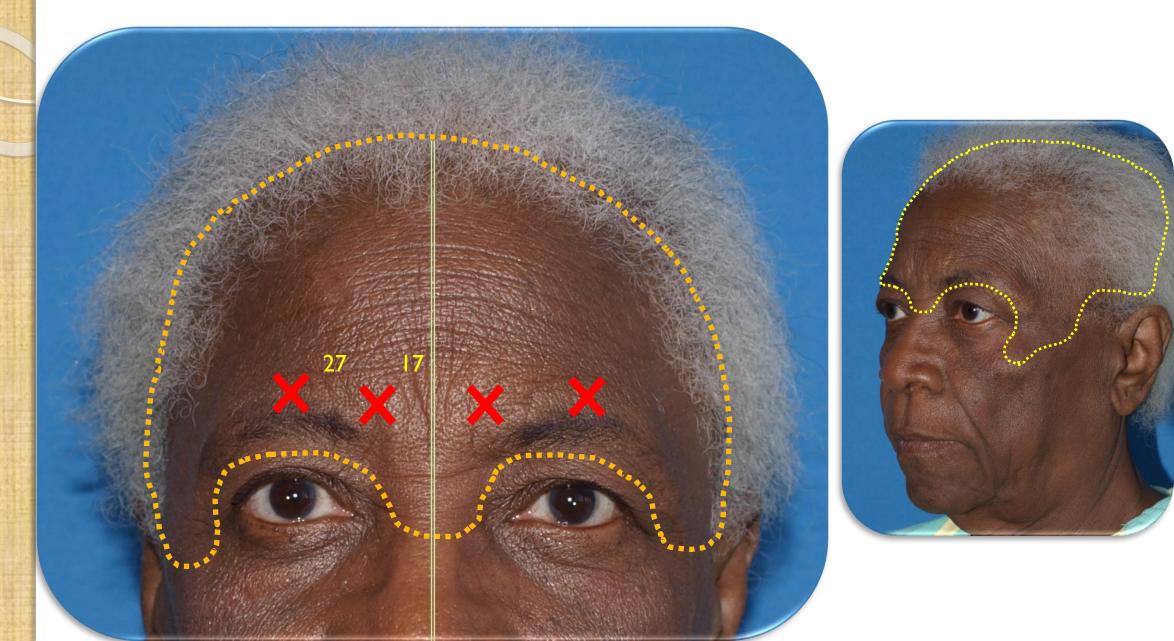
### Trichophytic Browlift, Upper Blepharoplasties, and Ptosis Repair



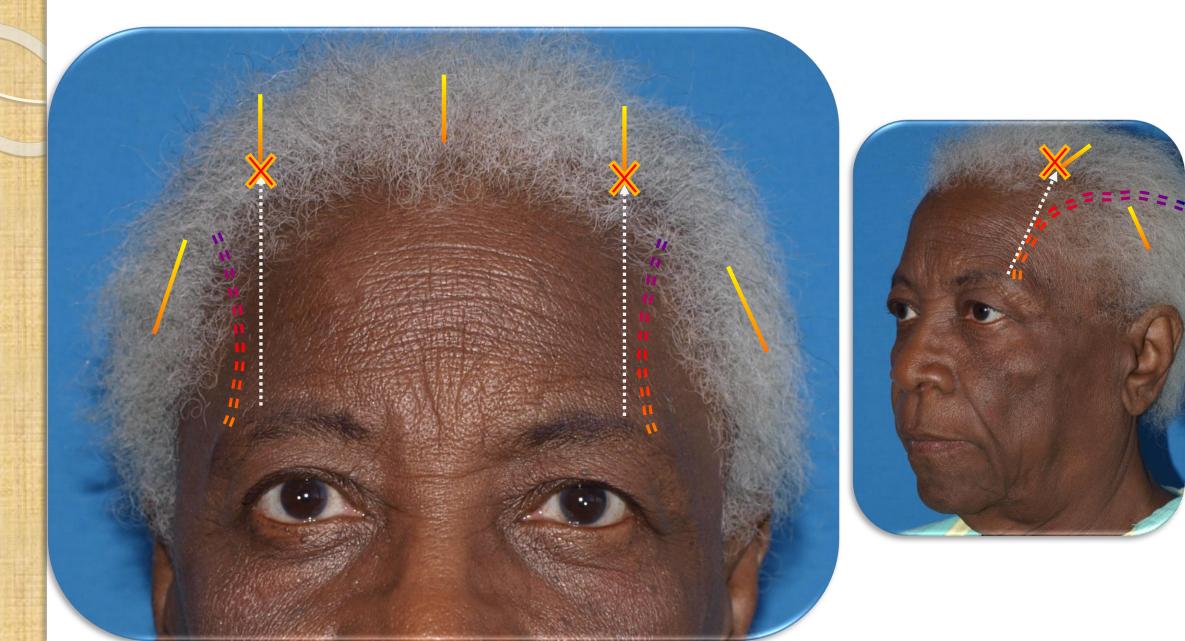
### Endoscopic Browlift and Upper blephs



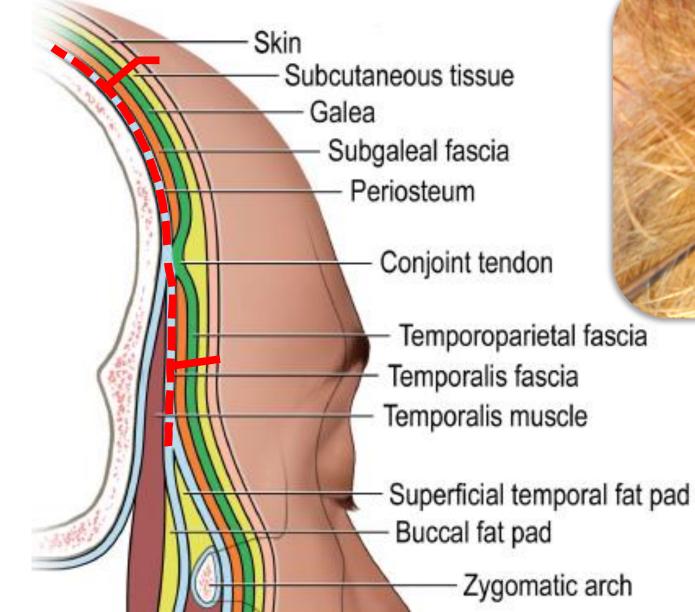
Endoscopic Browlift



Endoscopic Browlift

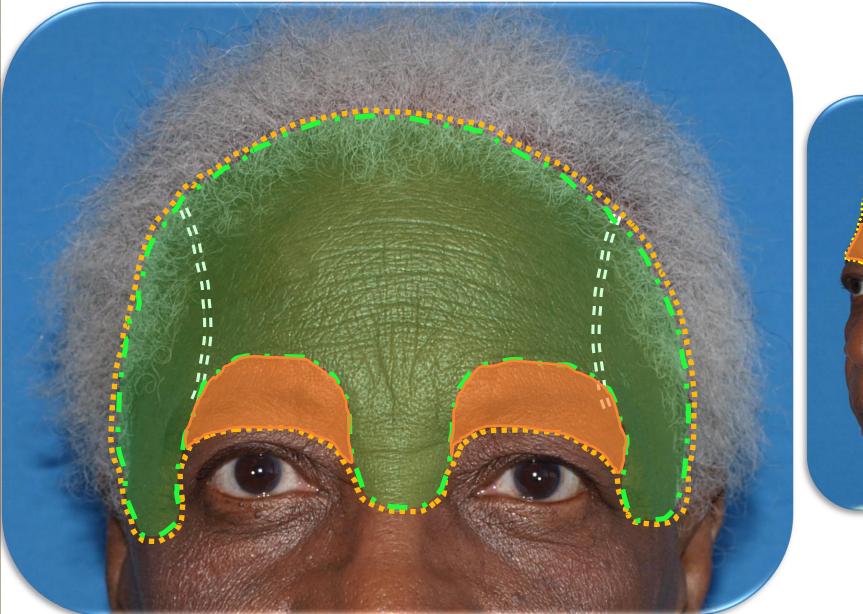


### Endoscopic Browlift



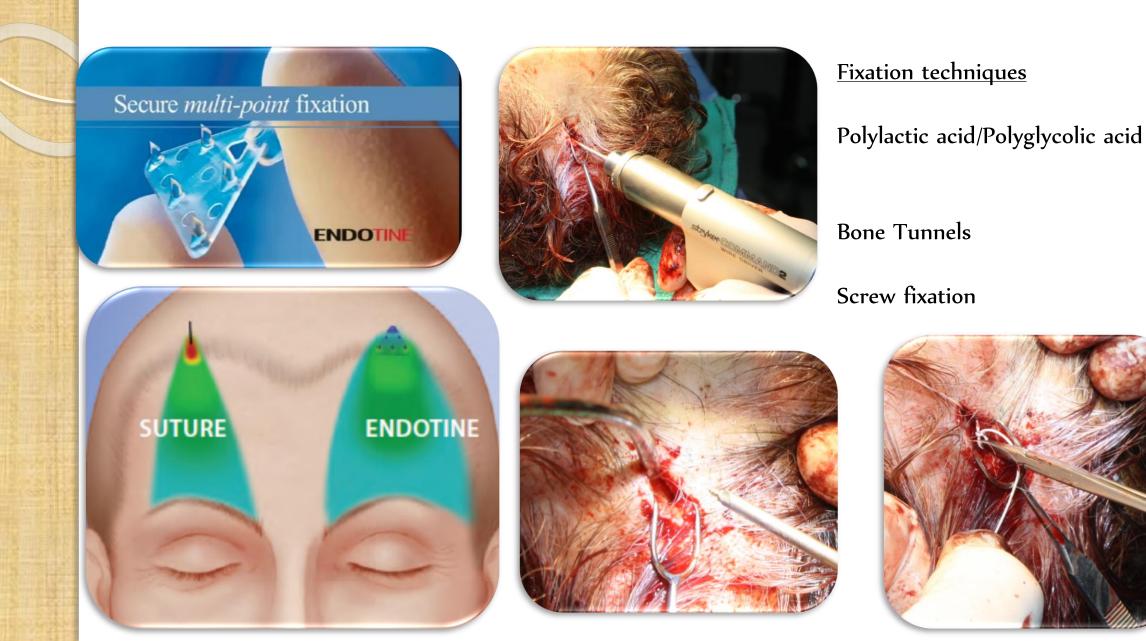


Endoscopic Browlift

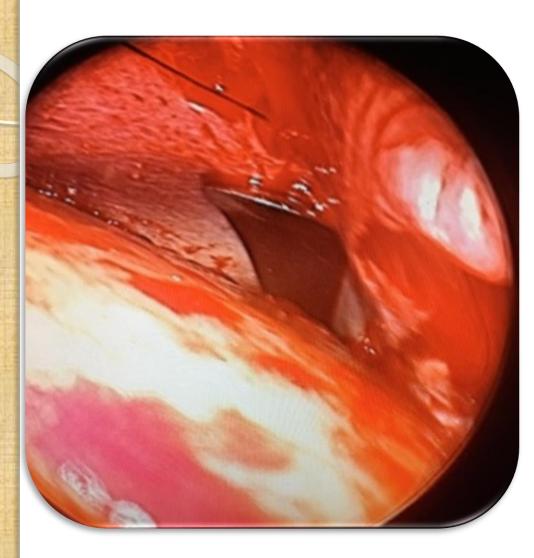


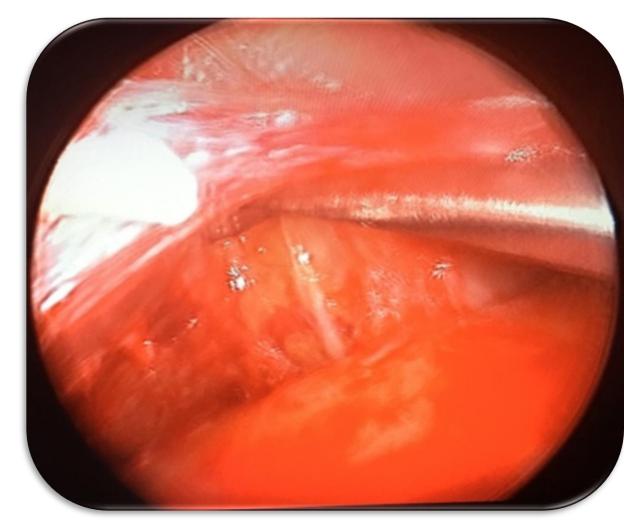


### Endoscopic Browlift

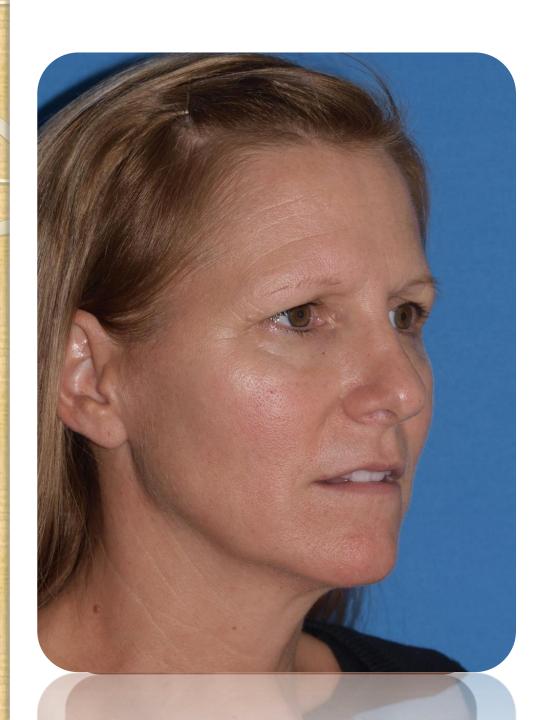




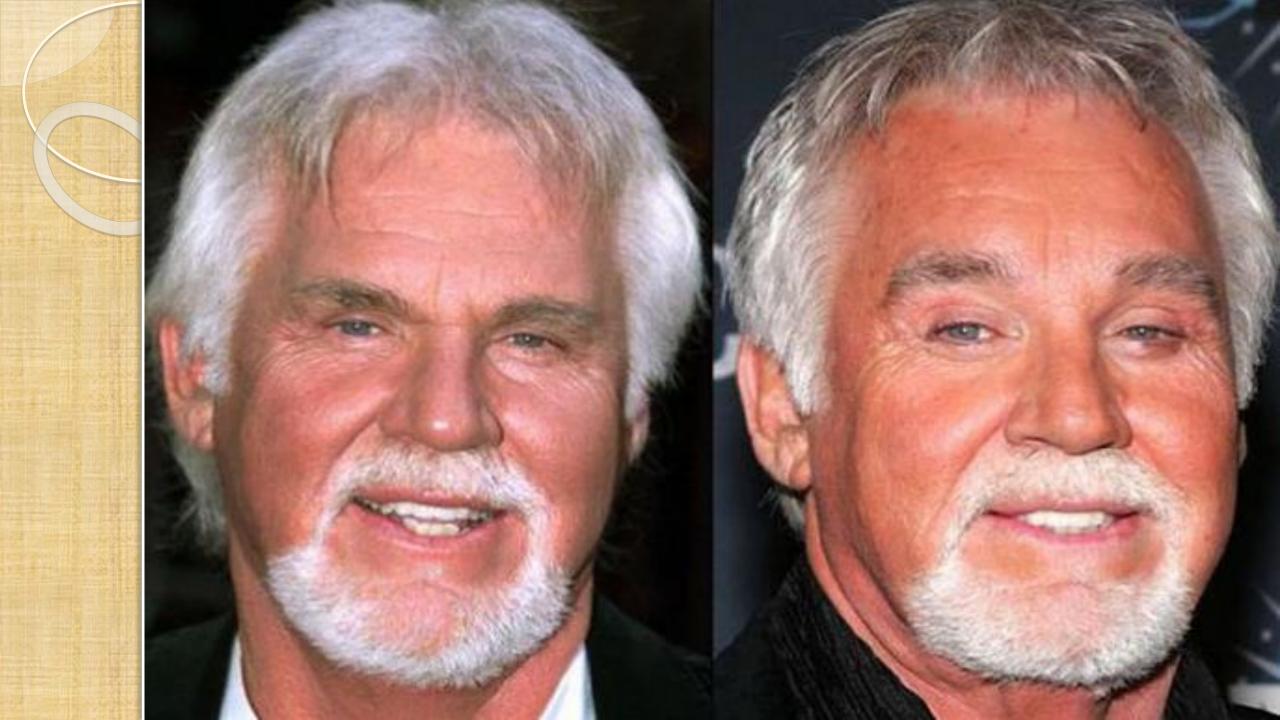












### History of Facelift

- Initially elliptical (fusiform) excision of redundant skin
- 50's "classic" facelift in use; subcutaneous only
- 1974 Skoog develops subfascial approach
- 1976 Mitz and Peyronnis defined the SMAS
- 1980's-90's deeper planes being developed (Hamra; deep plane and composite lift)
- Subperiosteal dissection, High SMAS lifts, Connell and Maren 1995
- MACS (Minimal Access Cranial Suspension Lift) lift, Tonnard 2009

### Pre-Operative Eval

- Diabetes
- Smoking
- Collagen-vascular disease
- Psychiatric history
- Steroid use
- Hypertension
- Prior surgery
- ASA/NSAIDS
- Herbal meds



### Pre-Operative Eval



### Submental Adiposity



Platysmal Banding



#### Submandibular Gland Ptosis



Jowling



#### Cervical Skin Laxity



Deficient Genial Projection

### Dedo Classification



A **Class 1** normal younger patient with a well defined mental angle, little fat, and good skin and platysma tone.

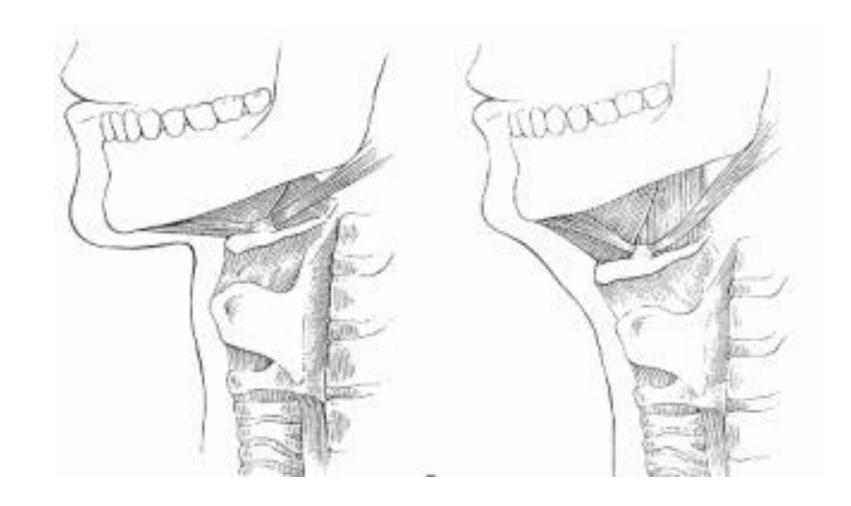
**Class II** laxity of the cervical skin without significant fat deposition or muscle pathology. The skin must be redraped so wide undermining is required but a submental incision is usually not needed. A standard rhytidectomy with plication of the SMASplatysma complex is usually all that is required.

**Class III** pathologic layer of subcutaneous fat, which is either genetic or acquired and liposuction is usually required to improve the cervical contour.

**Class IV** varying degrees of platysma pathology, which must be diagnosed by voluntary facial grimacing preoperatively. This is usually evident as anterior cervical cording, but it may be difficult to asses the platysma due to fat accumulation. These patients require some form of surgical manipulation of the platysma.

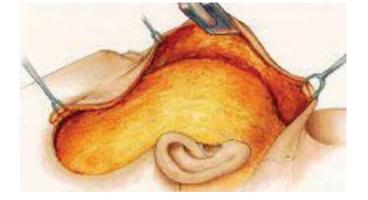
**Class V** retrognathia that contributes to their neck pathology and may require chin augmentation or mandibular osteotomies.

**Class VI** patients have an abnormal hyoid position. The hyoid is either too low or the mandible-to-hyoid distance is too low, limiting the effect of submental surgery. Patients with abnormally low hyoids (normal is at C4) need to be counseled preoperatively because there are currently no effective procedures to elevate the hyoid and their surgical results will likely be less than optimal.

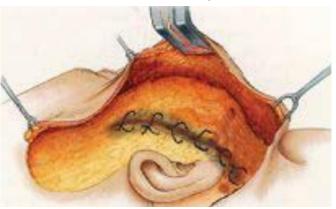


Ideal hyoid is high and posterior for optimal cervicomental angle

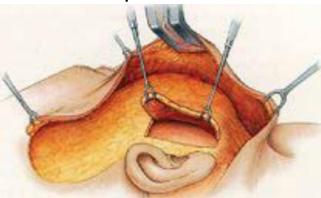




Skin Flap



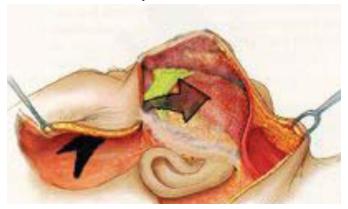
Skin Flap with Plication



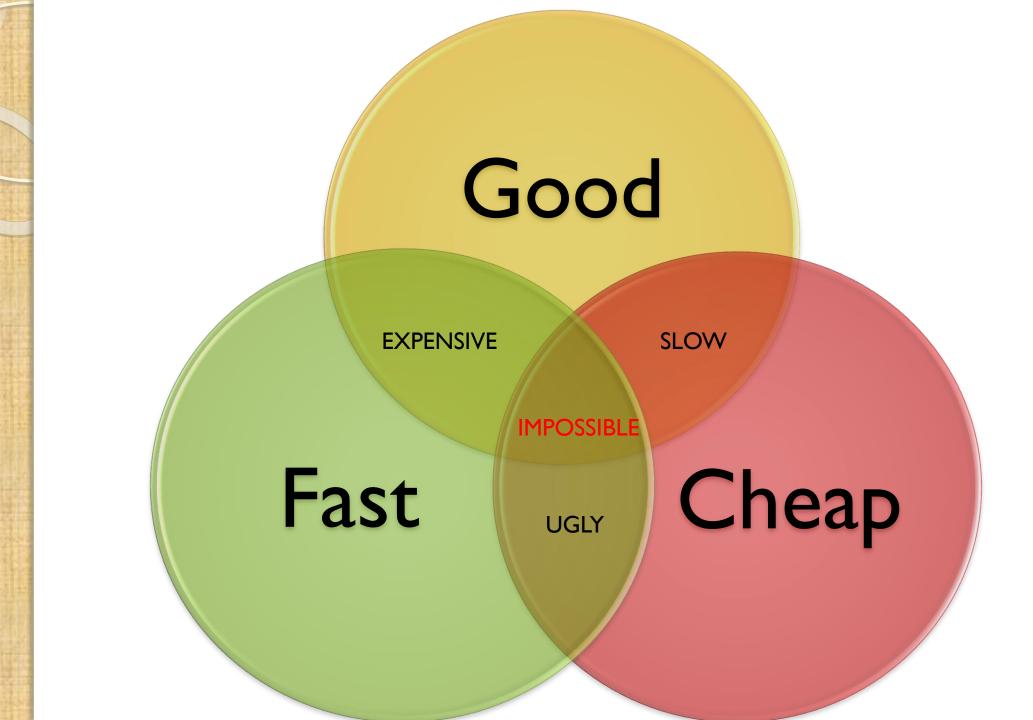
Sub Musculofascial



Deep Plane



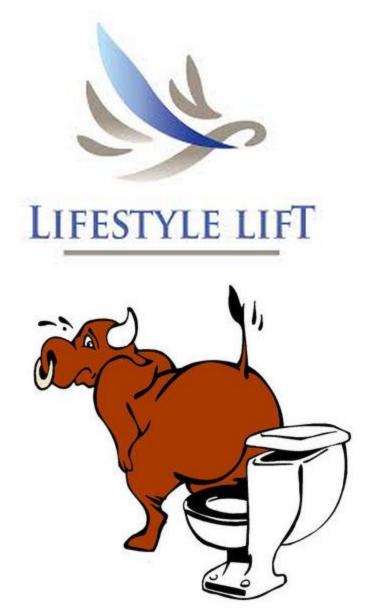
Subperiosteal

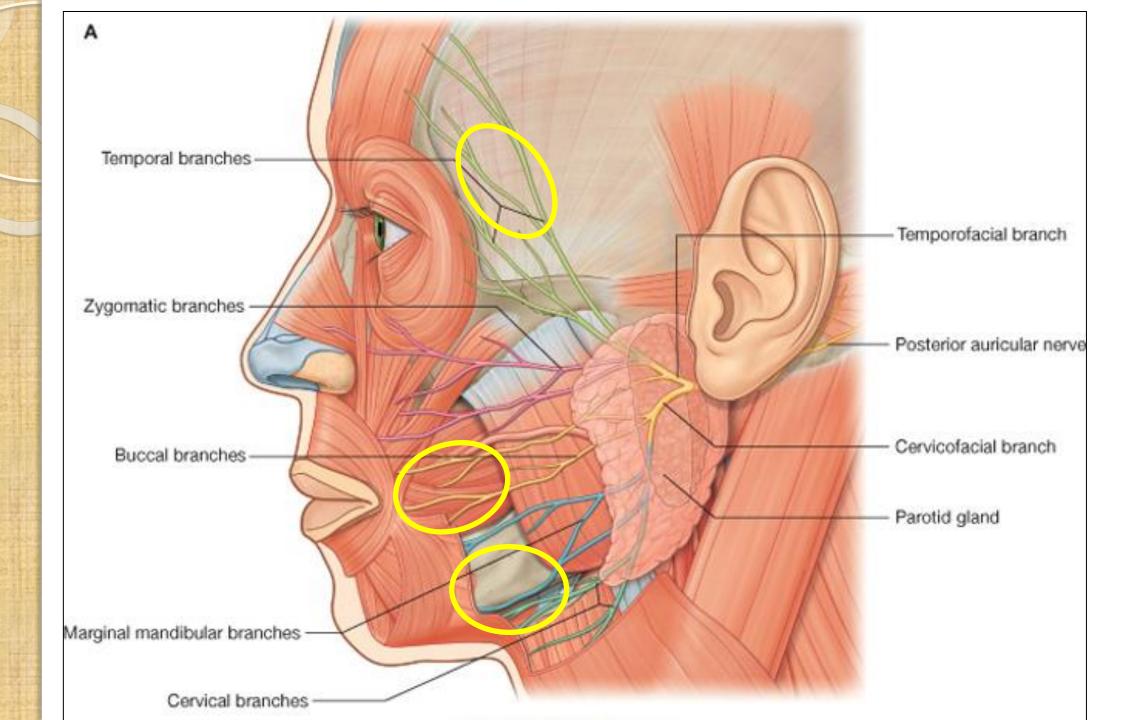


### The Latest and Greatest?

S-Lift Quicklift Lifestyle Lift Weekend Lift

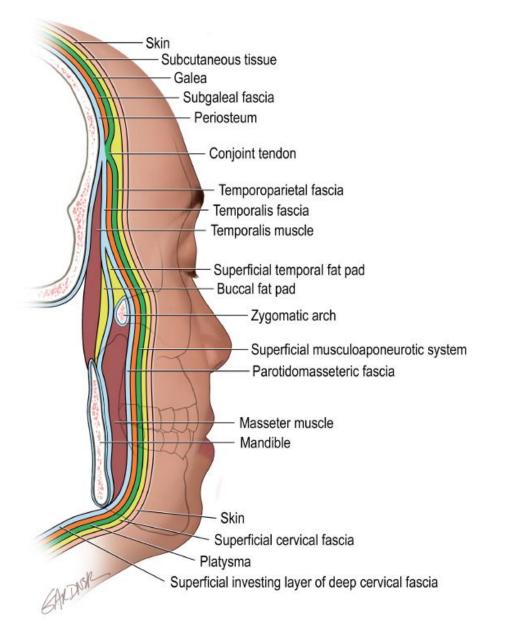
MACS-Lift The Better Lift

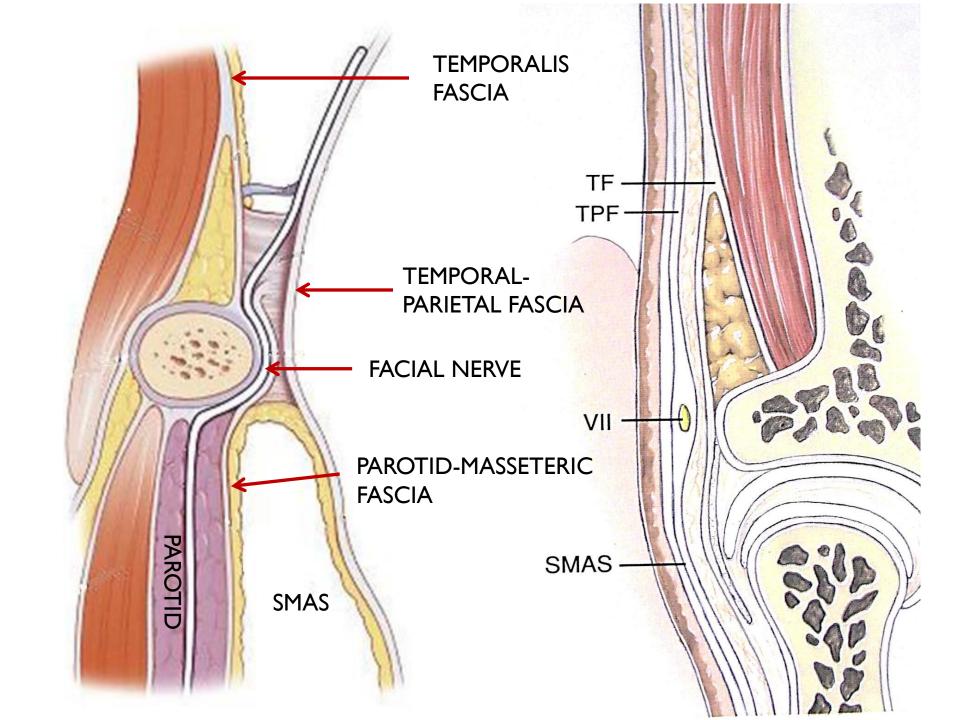


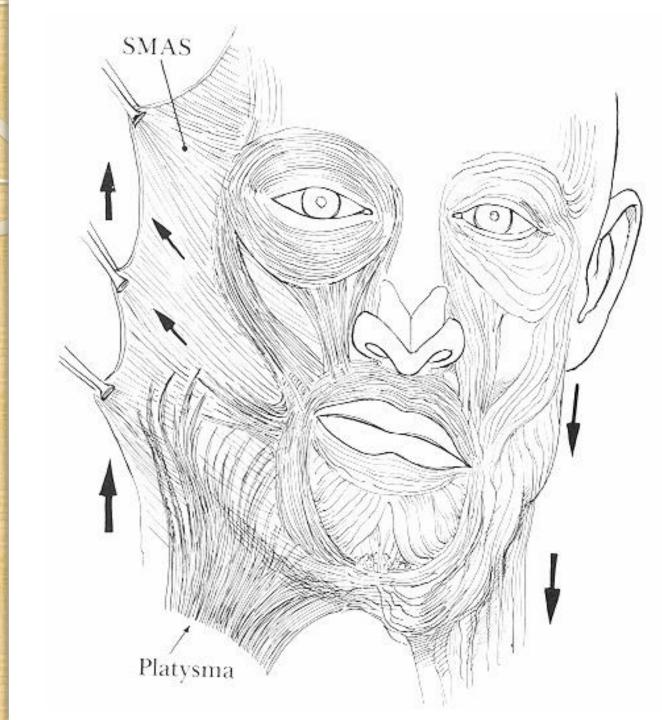


### The SMAS

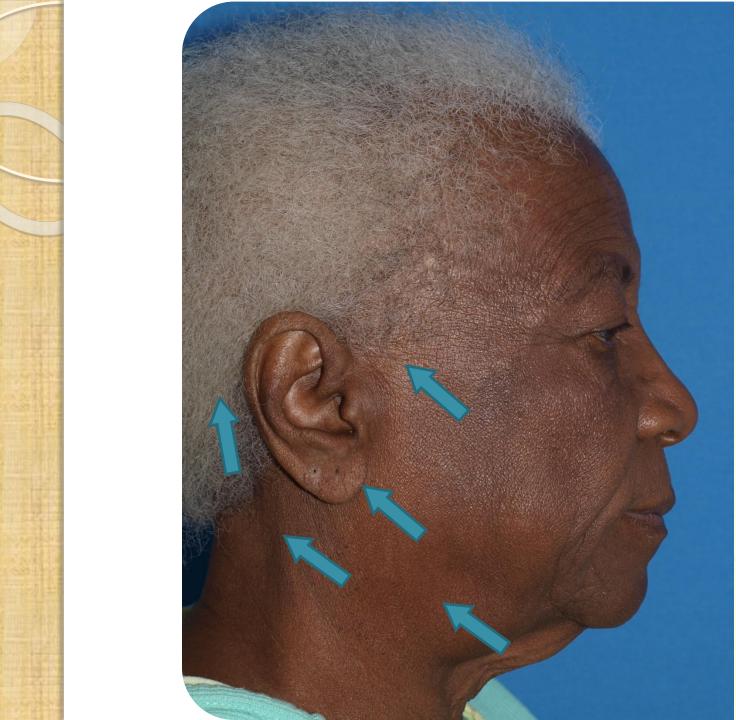
- Superficial Musculo Apneurotic System
- Contiguous with platysma in the neck and galea of the scalp
- Superior and posterior vector of pull
- Branches of CN VII become superficial past the parotid masseteric fascia
- Temporal branch most commonly injured as it crosses the arch

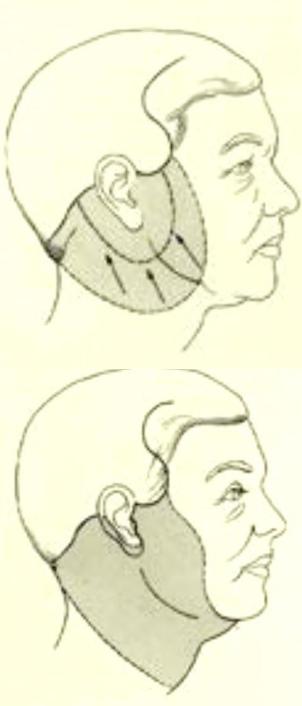






- SMAS is a single continuous layer, containing platysma, mimetic muscles of the face and the temporoparietal fascia
- The mimetic muscles & SMAS move as a single layer during facial animation
- Skin is an **elastic, distensible** layer that covers and contours over the underlying structures
- SMAS is a **sturdy, fibrous**, inelastic layer, thicker posteriorly, overlying the parotid gland, thin over the masseter
- SMAS facelift consists of two layers (skin and SMAS) which are undermined and suspended independently

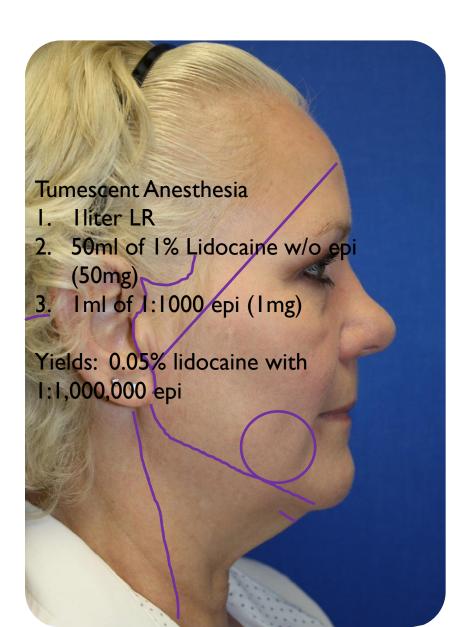




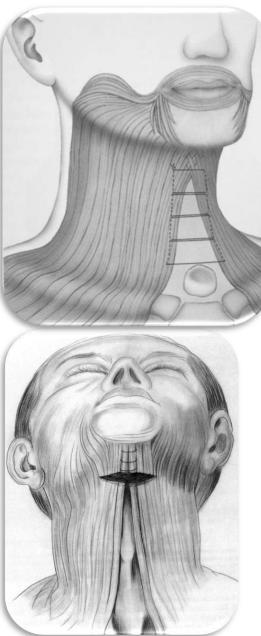


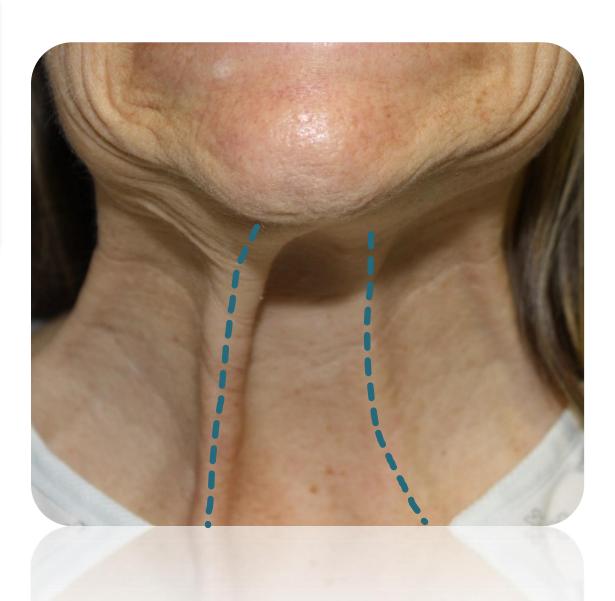
### Sequence

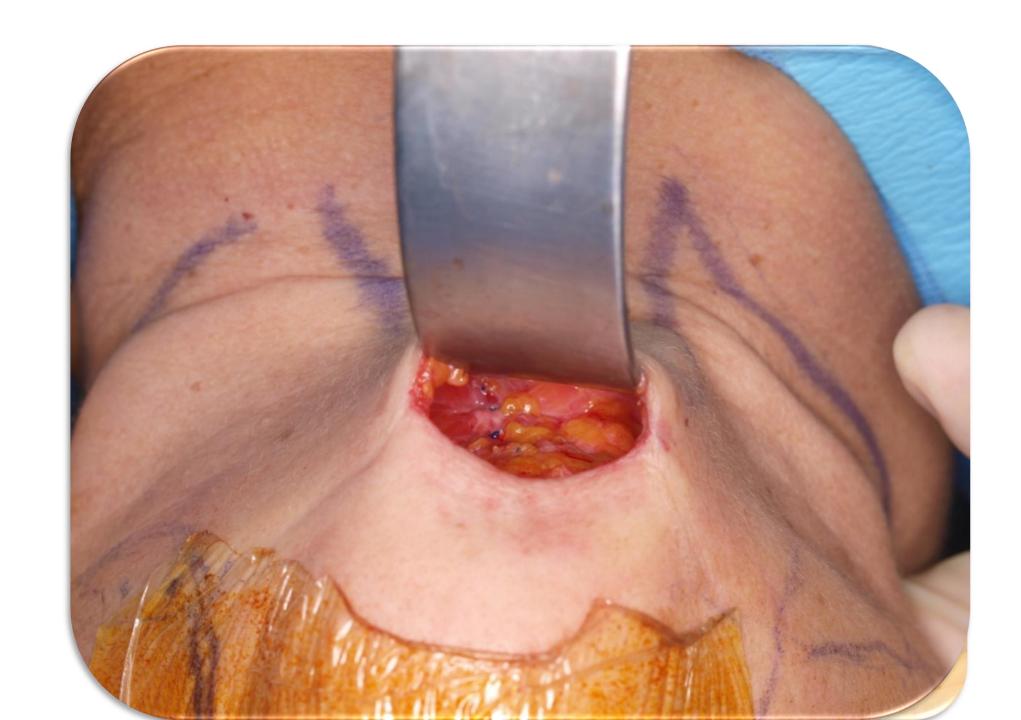
- 1. Consent
- 2. Mark the patient
- 3. To the OR to prep and drape
- 4. Tumescent anesthesia
- 5. Submental liposuction
- 6. Platysmaplasty
- 7. Face lift incision
- 8. Subcutaneous dissection
- 9. Skin cutbacks
- 10. SMAS work (plication, imbrication, SMASectomy, Bi-plane, deep, etc.)
- 11. Hemostasis
- 12. Drains?
- 13. Closure
- 14. Home



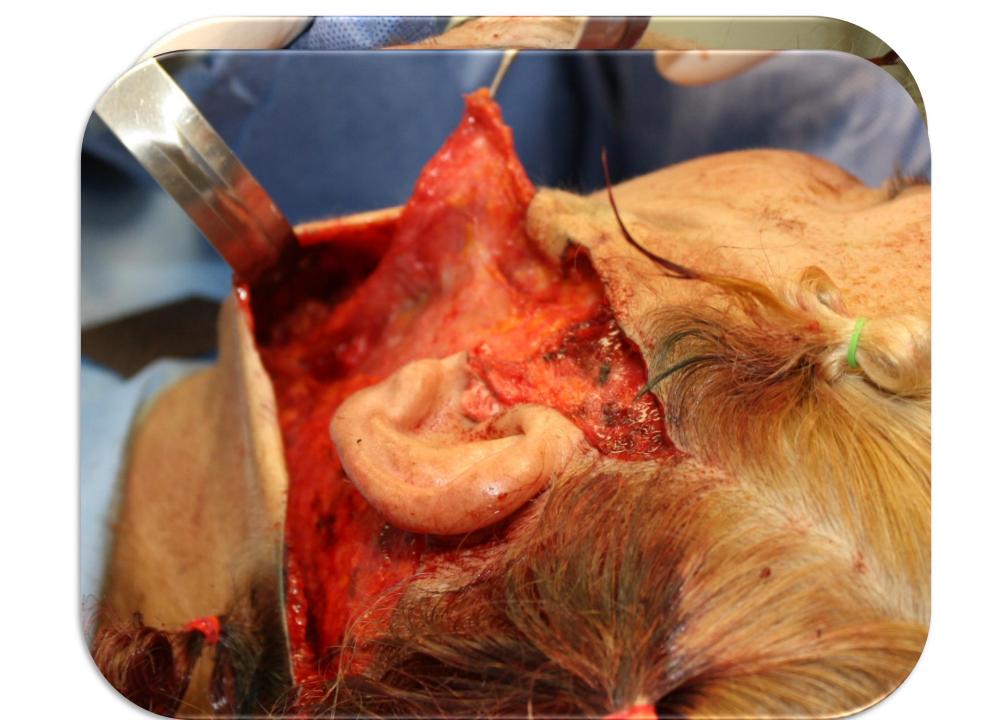
## Platysmaplasty

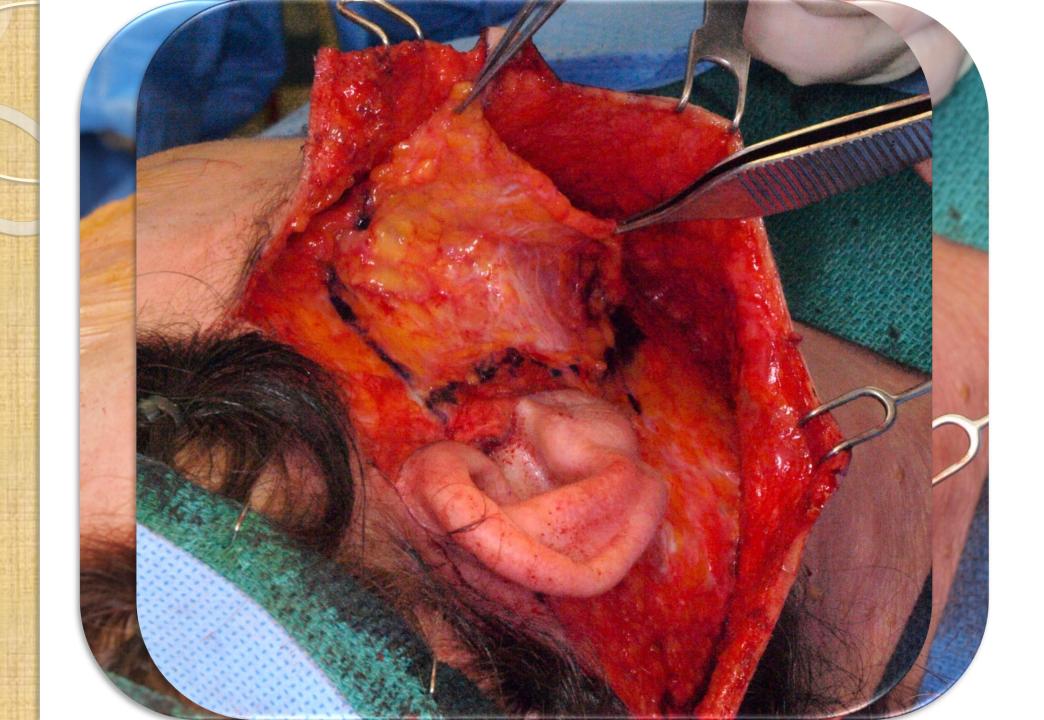














## DIEPENBROCK

FACIAL COSMETIC SURGERY

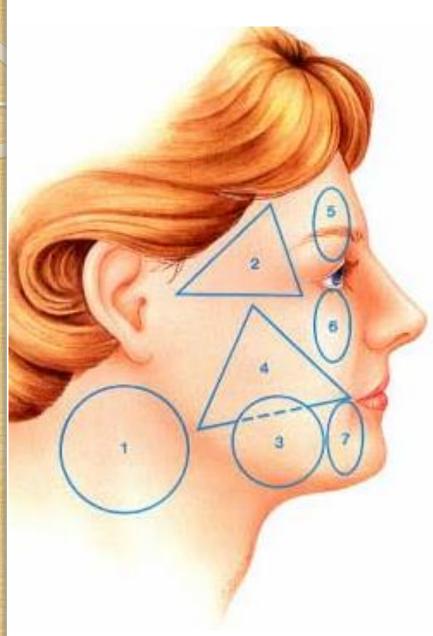


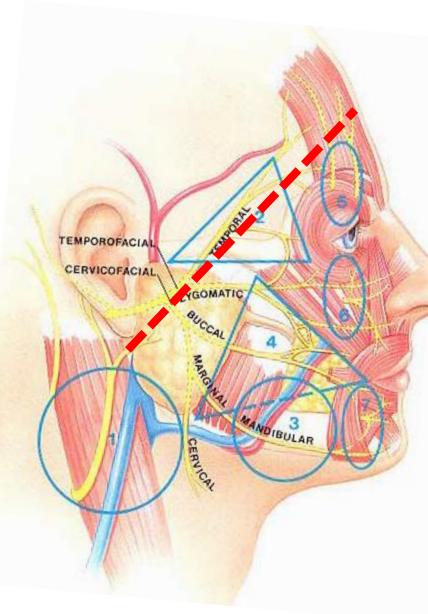
# DIEPENBROCK

FACIAL COSMETIC SURGERY



#### Complications





Pitanguay line defines the course of the frontal branches of VII

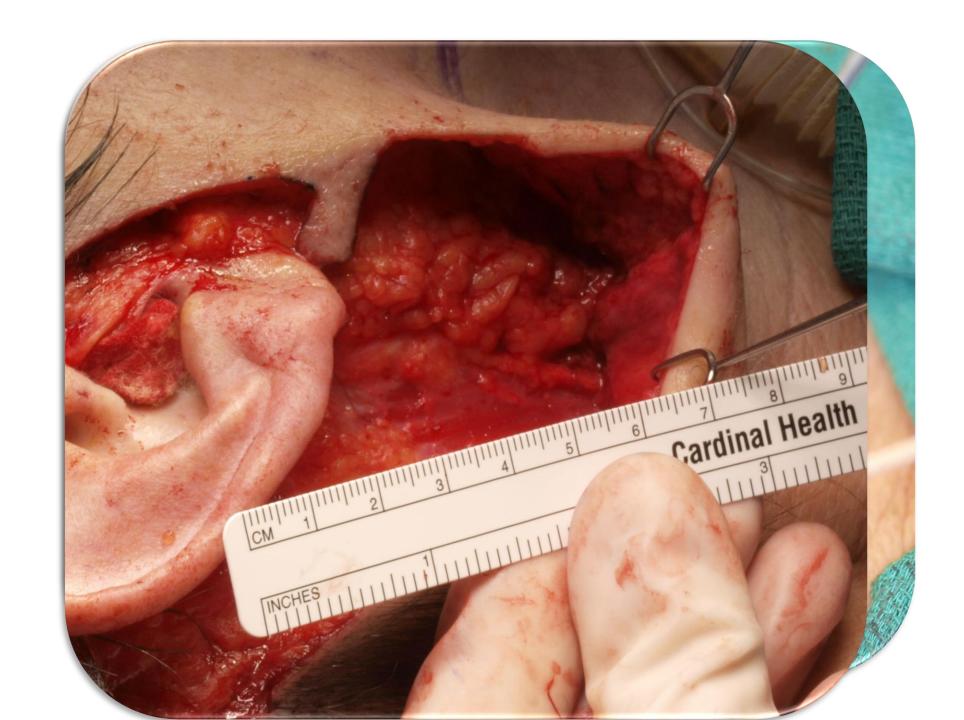
(ear lobule to ½ way between ear & lateral canthus)

#### Complications

- Sensory nerve damage Time, Reassurance, patience
- Facial nerve damage Time, neurotoxin, facial reanimation, lawyer
- Hematoma Drainage, pressure dressing, return to operating room
- Sialocele drainage, pressure dressing, antisialagogues, patience
- Allopecia Time, hair transplant
- Tissue necrosis H2O2/H2O, keep moist, nitro-paste, hyperbarics

or aesthetic res rring - Ti ie ear - Ea nted tragus vated temporal pped hairline ouncil car revision







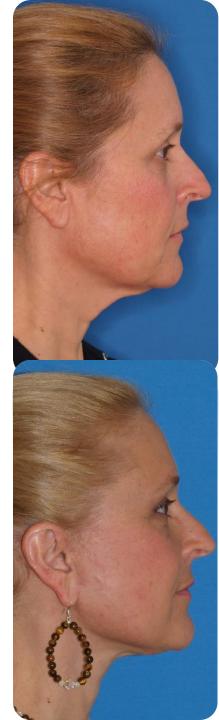
## DIEPENBROCK

FACIAL COSMETIC SURGERY

Face lift, Neck lift, Upper and Lower Blephs, Cheek and Chin Implants





















#### Fat Grafting





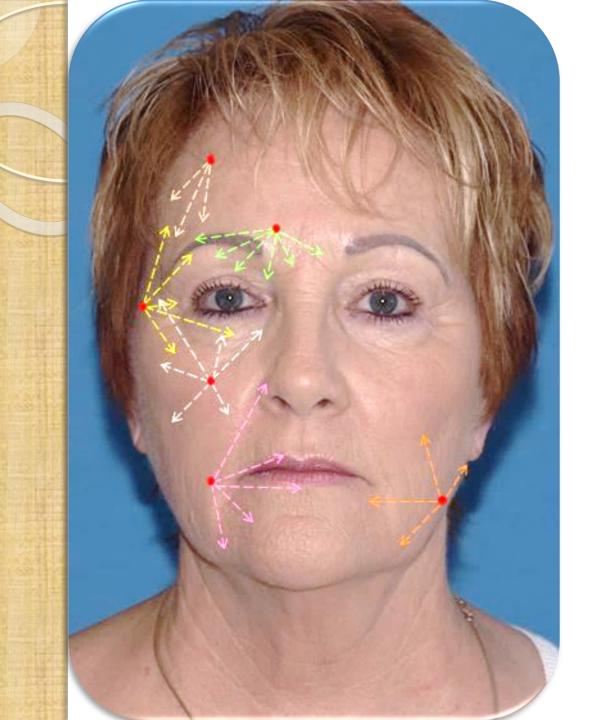


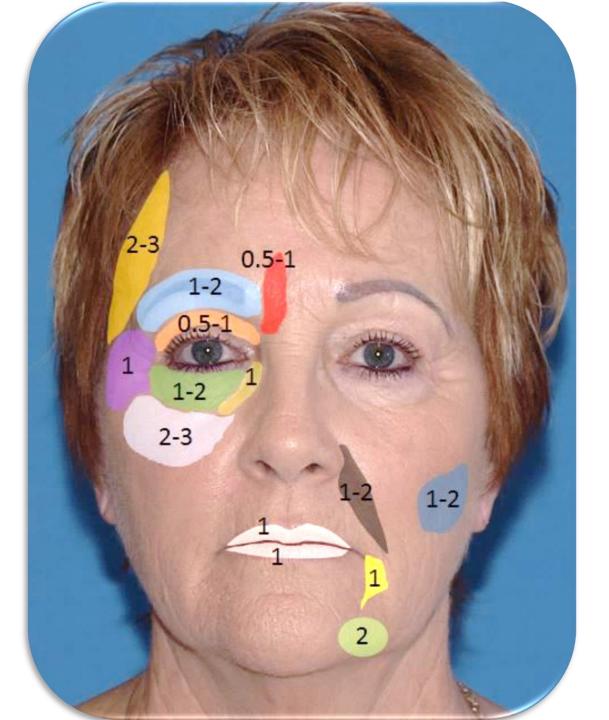


### Fat Grafting Technique

- 1. Less manipulation the better to produce high yield adipocytes
- 2. Harvested from flanks, thighs, buttocks, adbomen (periumbilical)
- 3. Prepped/draped/local anes/Tusmescent
- 4. Harvested with low suction and handheld syringe w/ harvest cannula
- 5. Fat is centrifuged or gravity separated
- 6. Transferred to smaller (1-5ml) syringes leaving infranate
- 7. Small ribbons or pearls into sub periosteum, muscular, sub-q, superficial fat layer
- 8. Overcorrected in cross-hatch pattern
- 9. Usually require multiple appointments (can be frozen up to 18m)



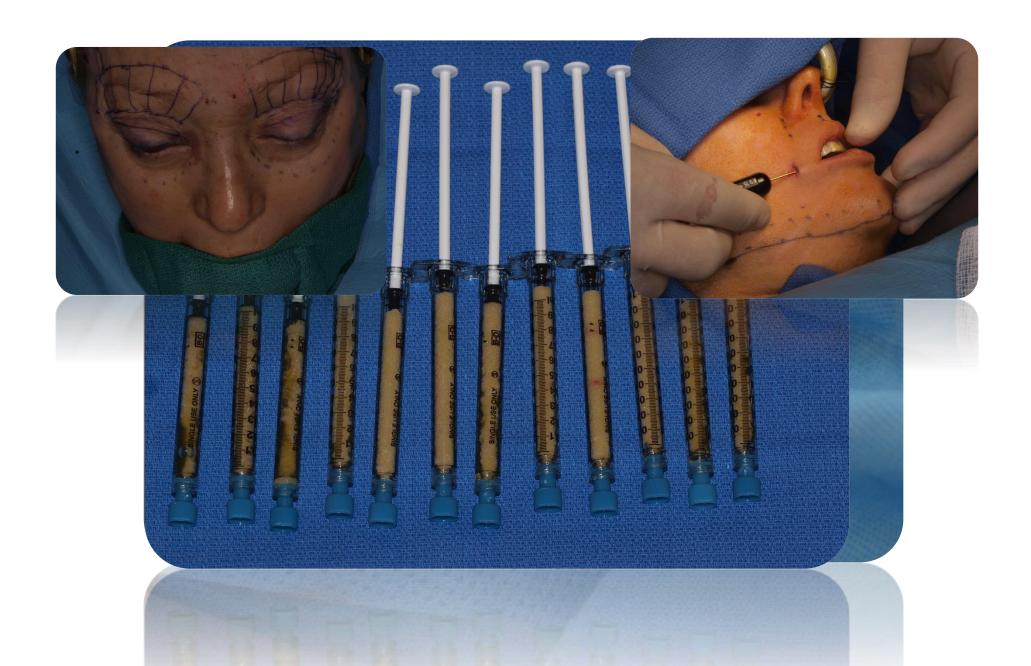




















Complications

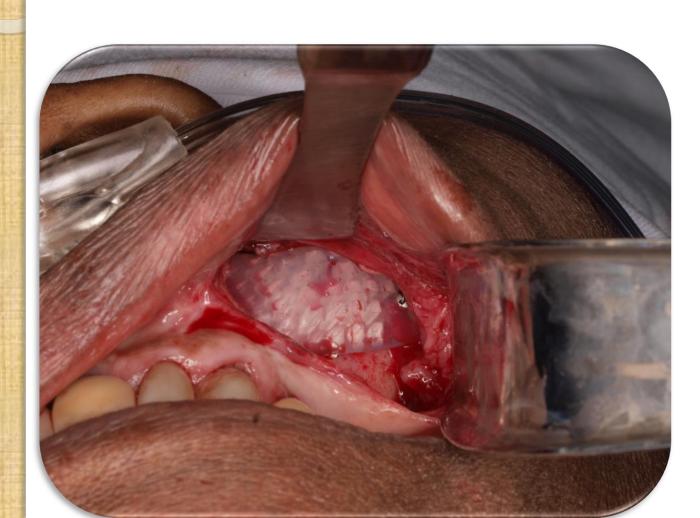
- Embolization leading to blindness, necrosis, stroke
- Resorption (debatable); 1/3 will take
- Lumpiness
- Dissipation
- Trauma at harvest site
- Poor esthetic results
- Learning curve











# CASE 2













