Rhytidectomy

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Rhytidectomy

- History
- Clinical Evaluation
  - Preoperative workup
  - Analysis of face
- Anatomy
- SMAS Facelift
  - Deep Plane/Composite Facelift
  - S-Lift
  - Complications
History

- Few early historical details
  - Early 20th century: Germans/French
  - Techniques guarded
  - Pre-antibiotic era – low profile
  - Published reconstructions not cosmetics
- Elliptical excisions of skin
- SQ undermining
History

- 1950’s “classic facelift” (Swanker)
- 1974: Skoog describes subfascial dissection
- 1976: SMAS named by Mitz/Peyronie
- 1970’s-80’s: short flap vs. long flap
- 1990’s-today: deep plane, composite rhytidectomies, laser resurfacing, S-lifting
Clinical Evaluation

- History
  - Find patient desires/motivations
  - SAFE
    - Self-image
    - Anxiety
    - Fear
    - Expectations
  - Don’t operate if you don’t feel positive
  - Compliance
Clinical Evaluation

- History
  - Relevant medical history
    - DM, smoking, CVD, psychiatric problems, steroid use, HTN, prior surgeries/scarring
    - Medicine use: ASA/NSAIDs, steroids, vitamin E, OTC herbal supplements
Physical Examination

- Anatomic Evaluation
  - Checklists may help

- Skin Characteristics

- Photos

The Upper Third

The Forehead
- Hair: coarse, fine, thin, thick, balding
- Hairline: low, normal, high, absent, surgically absent
- Sideburns: low, normal, high, surgically absent, surgically altered
- Eyebrow pattern: full, partially plucked, absent, surgically absent
- Rhytids: Forehead-transverse: absent, shallow, deep, surgically altered — pattern
- Glabellar frown: absent, shallow, deep, surgically altered — pattern
- Headaches: never, rare, frequent, location
- Skin: Orbital rim; bare, hairbearing
- Ptosis/brows + supratarsal (right and left): none, relaxed, ptotic

The Upper Eyelids
- Prior blepharoplasty scar: years postoperative, mm from lid margin, mm from brow line
- Supraorbital fat: medial 0.1.2.3.4 +/mid 0.1.2.3.4.+/central 0.1.2.3.4. + right and left
- Palpebral aperture at midpoint: R mm L
- Symmetric
- Asymmetric: description of asymmetry
- Levator function: ptosis, pseudoptosis, attenuation
- Supratarsal skin redundancy:
  - Wrinkled, but palpebral fold visible right and left
  - Palpebral fold obscured right and left
  - Hooded skin rests on lashes right and left
- Hoods extend laterally right and left

The Lower Eyelids
- Scleral show: R mm L
- Tone of margin: good, fair, poor, surgical
- Eyelid margins: entropion, ectropion, senile, norm
- Retraction: R mm L
- Ectropion: R mm L
- Intraorbital fat: medial 0.1.2.3.4.+/mid 0.1.2.3.4.+/central 0.1.2.3.4. + right and left
- Skin: smooth, relaxed, wrinkled, festoons
- Orbicularis oculi muscle: paralyzed, hyperactive, hypertrophic, normal
- Malar bags: absent, small, large
- Visual acuity: right and left corrective lenses, contacts, cataracts, implanted lenses, impaired/blindness
- Schirmer's test: R mm L
- Minutes

Symptoms/history of keratitis

The Mid Third

The Face
- Facial configuration: round, oval, triangular, rectangular, skeletal, thin, normal, obese
- Facial cheek skin: thick, thin, atrophic, oily, dry, scarred
- Facial asymmetry
- Rhytids
  - Nasolabial: shallow/deep
  - Cheeks: parallel/comminuted
  - Perioral
  - Marionette/lines
  - Vertical/horizontal
  - Jowls: 0.1.2.3.4.+
  - Upper lip: elongated, margins thin, commissures downturned
  - Scars: nevi, papillomata, keratoses, malignancies, other
- Previous face lift scars: coronal/frontal, temporal, preauricular (pre-retrotargral), lobular (pulled), postauricular, mastoidal, occipital
- Ears: protrusion, antithecal contour, lobules (normal/enlarged), lobular fold (absent/normal/scared/pulled)
- Parotid: absent, small, normal, large, masses

The Lower Third

The Chin and Jaw
- Chin and jaw: retruding, small, normal, large, senile deformity
- Adipose deposits: submandibular, submental (0.1.2.3.4.+
- Submaxillary gland: small, normal, large, ptotic, masses

The Neck
- Skin: smooth, relaxed, ptotic, scarred
- Rhytids: multiple, crepey, 0.1.2.3.4.+
- Platysma: anterior cords (early, parallel [diverging, ptotic, 0.1.2.3.4. +]), secondary cords
- Lesions: keratoses, nevi, papillomata, other
Clinical Evaluation
Clinical Evaluation

- “Face-lift”
  - Chin/neck lift
  - Nasolabial fold
  - Fine or deep rhytids

- Ideal patient
  - Elastic skin
  - Distinct bony landmarks
  - Little SQ fat
  - Good bone structure (hyoid)

- Adjunctive techniques
Clinical Evaluation

- Adjunctive Techniques
  - Laser peel
  - Dermabrasion
  - Chemical peel
  - Neck treatment
  - Implants
  - Blepharoplasty
  - Forehead
  - Rhinoplasty
Clinical Evaluation

- Other adjunctive techniques
Clinical Evaluation

- Important to assess hyoid position
  - High hyoid is ideal for cervicomental angle
Clinical Evaluation

- Less than ideal candidates
  - Discuss expectations in detail
  - Need for other procedures
Clinical Evaluation

- Develop operative plan
- Plan adjunctive procedures
- Prescriptions (pain meds, antibiotics)
- Instruction sheet
Anatomy

- SMAS
  - Superficial Musculo-Aponeurotic System
  - 1974 Skoog, 1976 Mitz/Peyronie
  - Distinct fascial layer from platysma to frontalis and into the galea
    - Discontinuous at zygoma
    - Envelopes zygomaticus major—NL fold
  - Septal connections to skin
  - Transmits forces of facial expression
SMAS
SMAS
SMAS
Platysma

- Mentalis
- Depressor labii inferioris
- Depressor anguli oris
- Branches of transverse cervical nerve (C2 and C3)
- Supraclavicular nerves (C3 and C4)
SMAS Facelift

- **Preoperative Marking**
  - In holding with patient upright
    - NL folds, jowl lines, platysmal bands, 2 cm from oral commissure, angle of mandible, frontal branch course
    - Incisions including submental incision
    - Rubber band hair

- **Anesthesia**
SMAS Facelift

- Preop phisohex evening and morning
- Perioperative antibiotics
- Head holder beneficial
- No paralysis
SMAS Facelift
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Figure 5. Z-plasty in submental area.
SMAS Facelift
SMAS Facelift

- Postop Care
  - Drain
  - Pain meds
  - HTN meds
  - Wound care
  - Instruction sheet
SMAS Facelift

- Complications
  - Hematoma (8.5%)
  - Skin Slough (1-6%)
  - Ear lobe deformities
  - Infections
  - Widening of scars
  - Hairline changes (1%)
  - Nerve Injury (0.4-2.6%)
    - Greater auricular
    - Frontal/Marginal
SMAS Facelift
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Subcutaneous Rhytidectomy

Subcutaneous Rhytidectomy with SMAS
Deep Plane Facelift

Deep Plane Rhytidectomy

Zygomaticus mm.

Platysma

Temple

Face

Neck

Subgaleal

Sub-SMAS

Preplatysmal
Composite Face Lift
Composite Face Lift
S-Lift
Minimal Access Cranial Suspension

- Devised for less dramatic facial rejuvenation
  - Less healing time/prolonged disfigurement
  - Lower complication rates
  - Less “operated on” look
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