

# Disclaimer

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# The Suprazygomatic (High SMAS) For Facial Rejuvenation

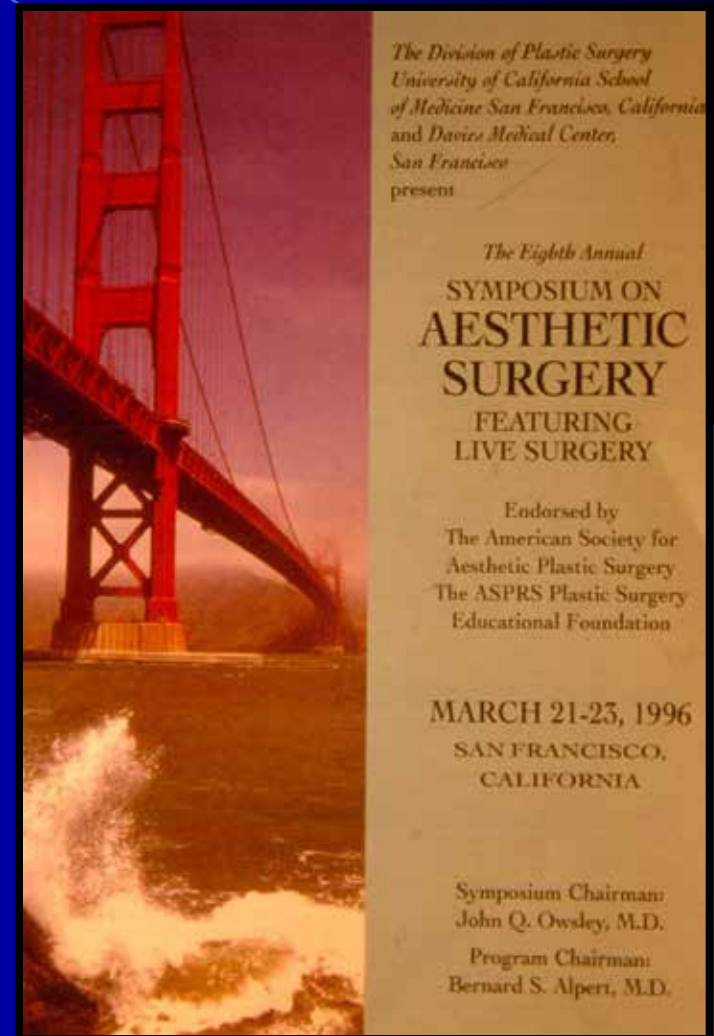
**Bryant A. Toth, M.D.**  
**San Francisco, California**



*Registrars Conference*  
*Australian Society of Plastic Surgeons*  
*Melbourne, Australia      April, 2013*

# RHYTIDECTOMY

- **Excellent results are more surgeon dependent than technique dependent**



# MIDFACIAL AGING

## *Soft Tissue*

- | Deepening of nasolabial fold
- | Descent of malar fat pad with loss of malar prominence
- | Descent of lower eyelid skin below the orbital rim
- | Deepening of tear trough



# Personal “workhorse” Technique

**HIGH SMAS FACELIFT**

# SMAS and FACELIFT

- | **Mitz and Peyronie; PRS July 1976**
- | **Well established method of face-lifting**
- | **Withstood test of time**
- | **Primarily used in an infra-zygomatic manner for infra-zygomatic structures**
- | **Traditionally SMAS has not addressed the mid-face**

**High SMAS allows for a**

**vertical vector**

**elevation of the deep fascial system**

**while allowing for an**

**oblique vector**

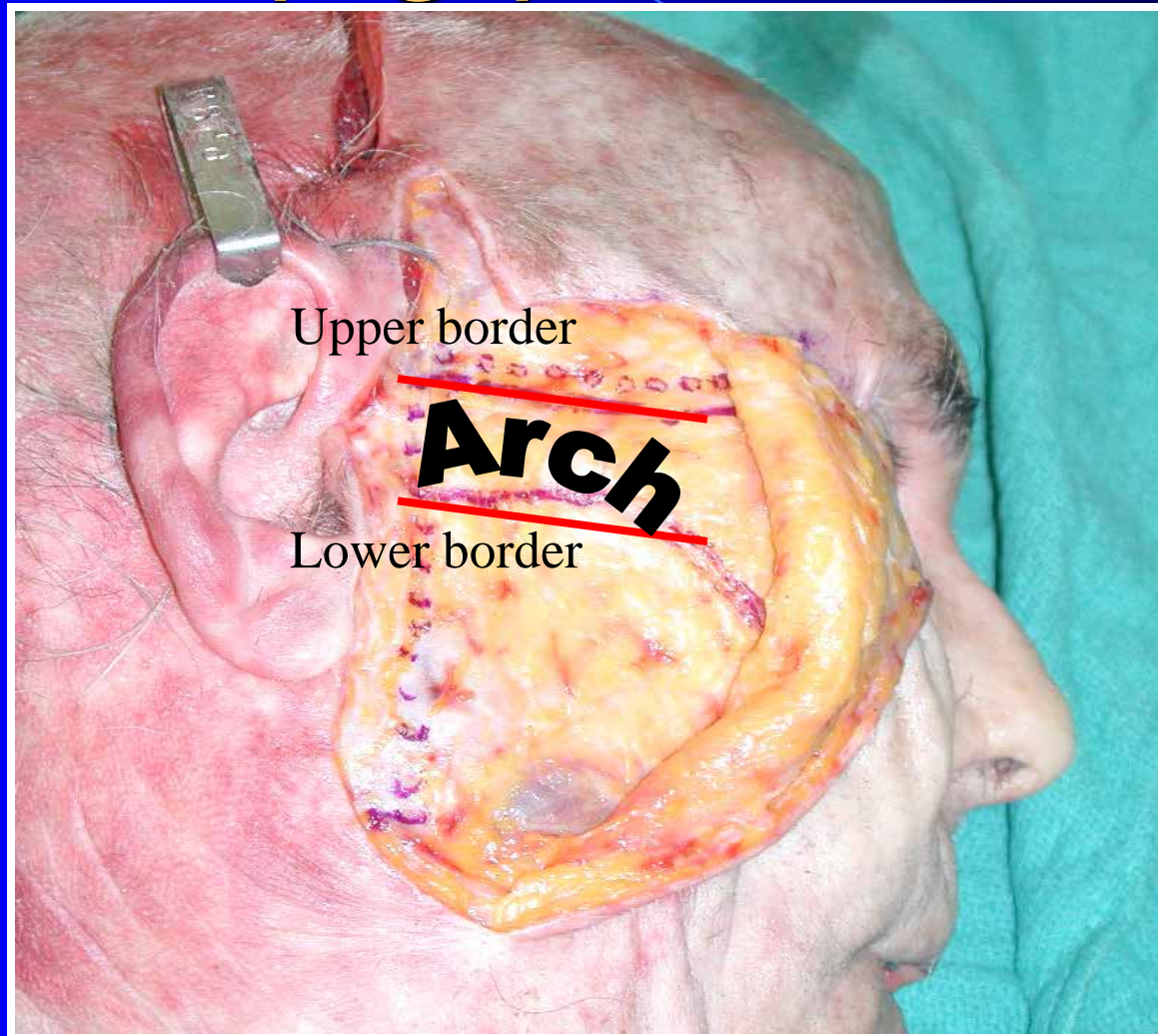
**of skin elevation**

# What is a High SMAS?

- | Upper edge of the zygoma or higher
- | Dissection is carried out over the zygomatic arch, not inferior to it
- | Fixation is to the deep temporal fascia, not to the cut superior end of the SMAS
- | Arc of rotation allows for midface softening



# SUPRAZYGOMATIC (*high*) SMAS



# High SMAS

Connell, **1970's**

Barton, FE. Rhytidectomy and the nasolabial fold. *PRS October 1992*, 601-607.

Connell, BF., Marten, TJ. The Trifurcated SMAS Flap: Three-Part Segmentation of the Conventional Flap for Improved results in the Midface, Cheek, and Neck. *AesthPS 1995*, 415-420.

Connell, BF., Semlacher, RA. Contemporary Deep Layer Facial Rejuvenation. *PRS November 1997*, 1513-1523.

Barton, FE., Hunt, J. The High-Superficial Musculoaponeurotic System Technique in Facial Rejuvenation: An Update. *PRS December 2003*, 1910-1917.



**Why is the high SMAS face lift not largely practiced?**

**Fear of injury to the frontal branch of the facial nerve**



# **Supra-Zygomatic SMAS Rhytidectomy and the Frontal Branch of the Facial Nerve**

**Bernard Alpert MD**

**Farzad R Nahai MD**

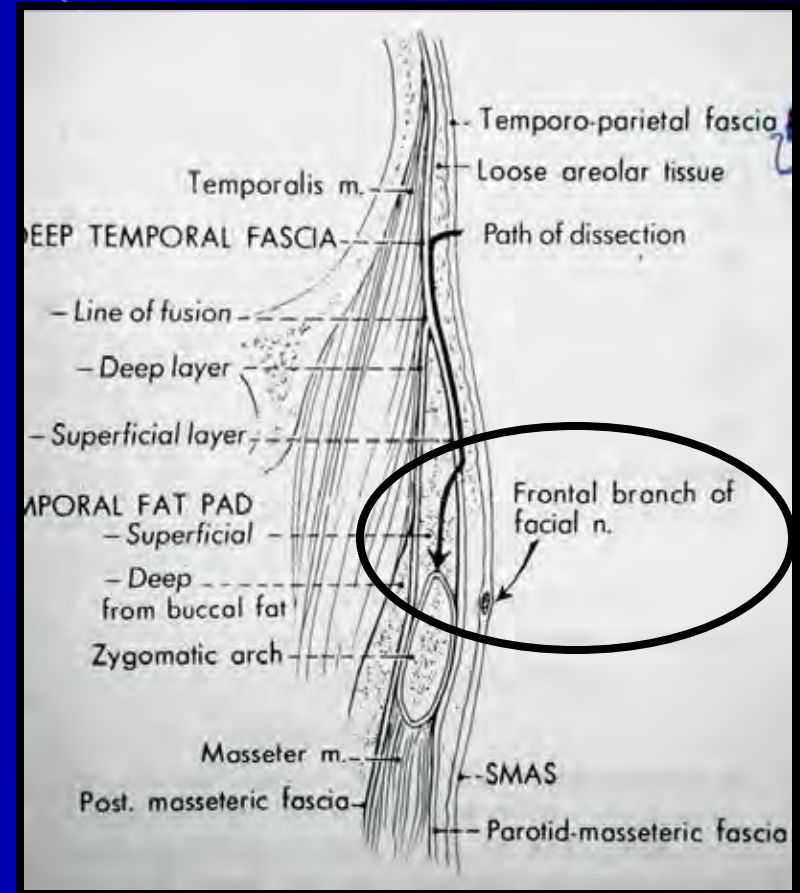
**Division of Plastic Surgery**

**University of California, San Francisco**

**Presented at the American Society of Aesthetic Surgery  
Meeting in Vancouver, B.C. 2004**

# Description of frontal branch

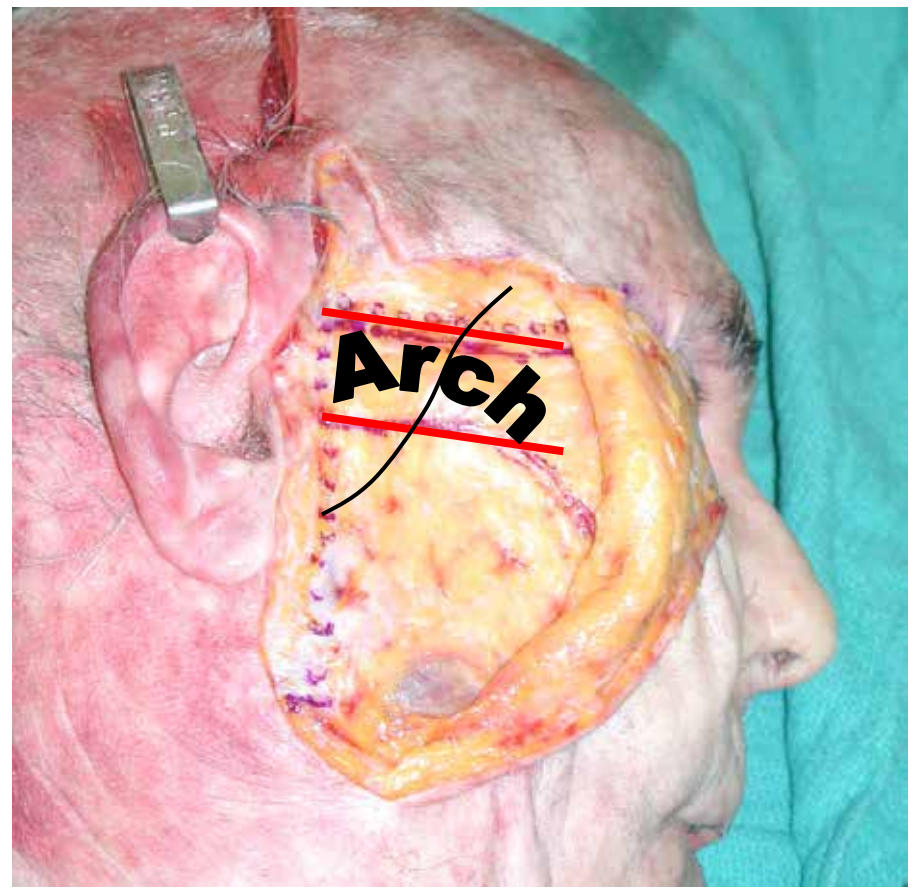
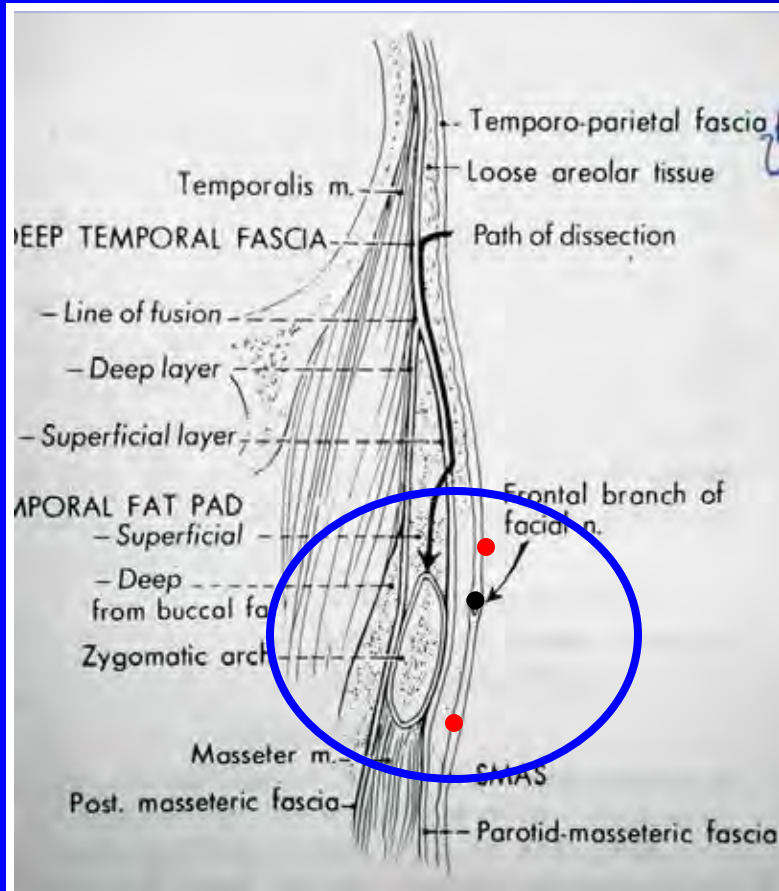
“ The frontal branch of the facial nerve, traveling within the tempoparietal fascia, ... It is in this location that the nerve is at greatest risk for injury.”



Stuzin JA., Wagstrom L., Kawamoto HK., Wolfe, SA. Anatomy of the Frontal Branch of the Facial Nerve: The Significance of the Temporal Fat Pad. *PRS February 1989*, 265-271.

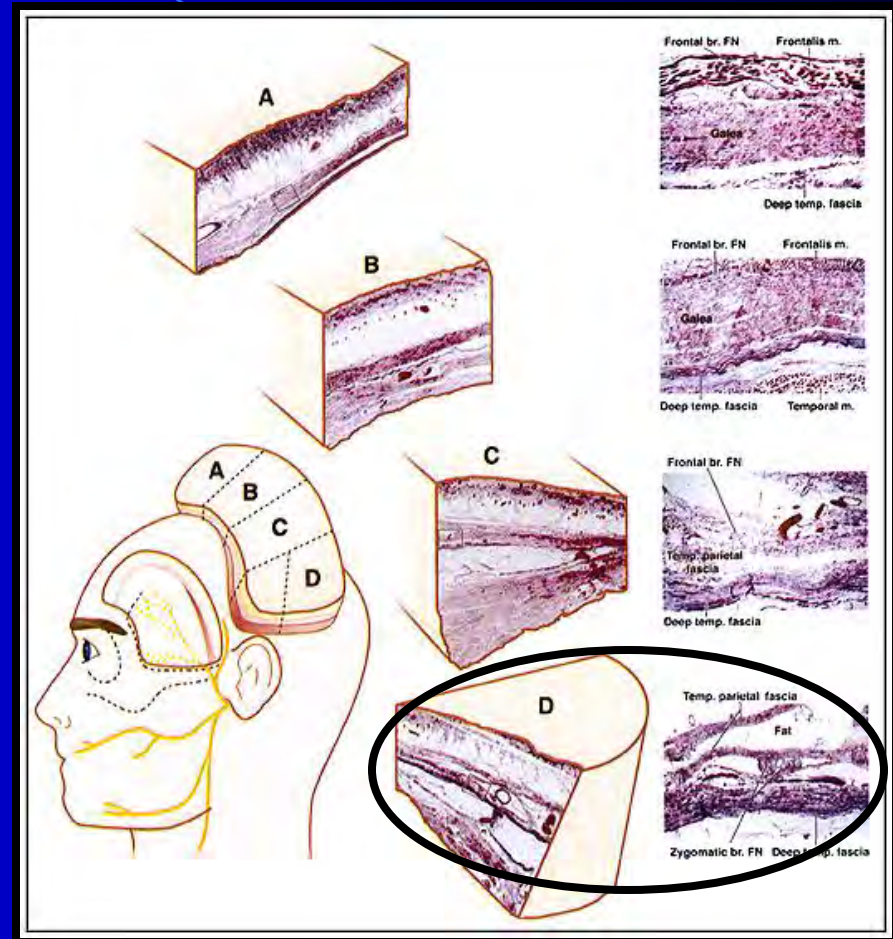


# Reluctance to make a Supra-zygomatic SMAS incision



# Neurosurgical literature

Describes the frontal branch coursing in a plane deep to the tempoparietal fascia immediately above the zygoma



Salas, E., Ziyal, IM., Bejjani, GK., Sekhar, LN. Anatomy of the Frontotemporal Branch of the Facial Nerve and Indications for Interfascial Dissection. *Neurosurgery*, September 1998, 563-569.





**Facial nerve runs just above the zygoma  
Deep to the SMAS**



# Why High SMAS?

- | **Vertical elevation of the deep structures of the face**
- | **Allows for fixation to the strong, deep temporal fascia**
- | **Allows for tightening of entire face and neck envelope**
- | **Softens nasolabial fold and brings malar structures back to their normal position**
- | **Safe, predictable, with excellent outcomes**

**“Plastic Surgeons are either  
plicators or underminers”**

**Thomas Biggs, M.D.**

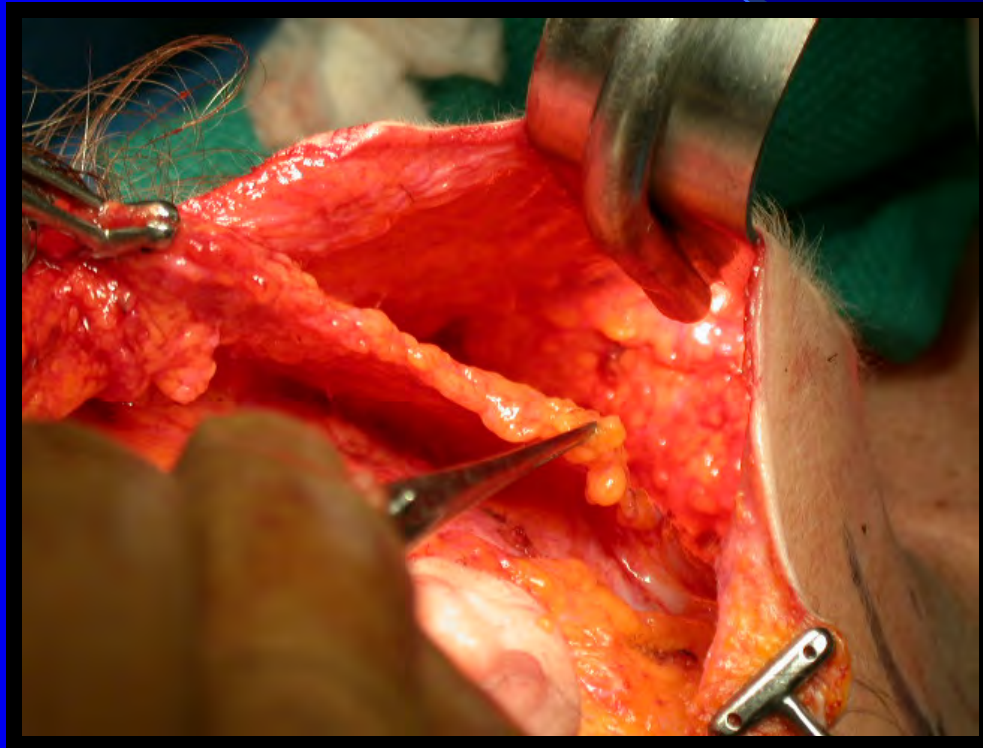
**I am an underminer!**

**I believe that undermining  
prior to fixation  
is the cornerstone to good  
long term results in any  
antigravity procedure**

# **HIGH SMAS Technique**

- | **Allows for vertical pull of SMAS-Platysma complex**
- | **Vertical tension fixates directly to the deep temporal fascia**
- | **Allows for tightening of entire musculo-fascial corset of the face**
- | **Minimizes tension on the facial skin**

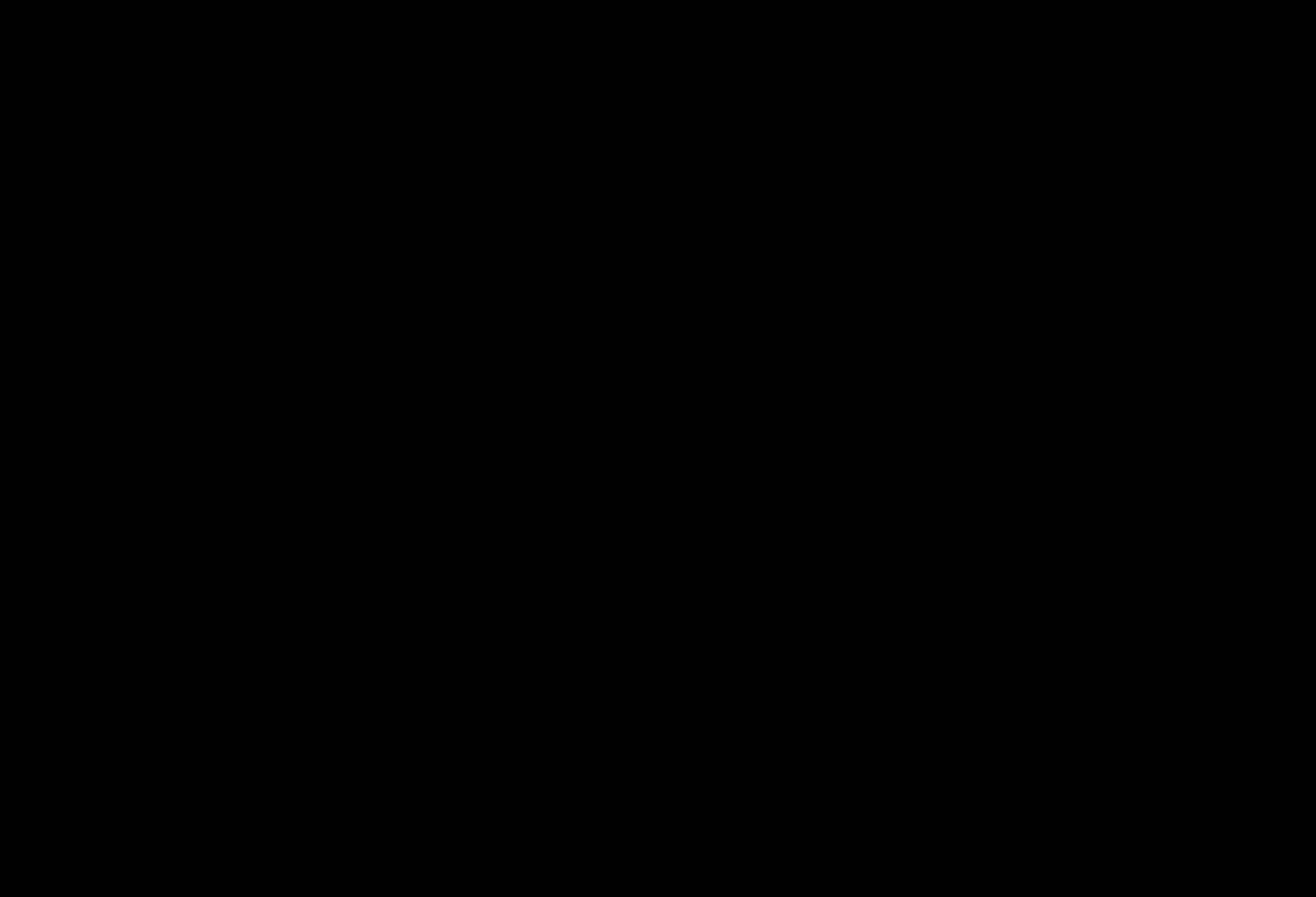
# HIGH SMAS TECHNIQUE



**The operation**



**54 year old woman for face and neck lift**



incision marking





**Standard periauricular, retrotragal incisions**





**Two plane technique in temple area with preservation of superficial temporal vessels**

A large black rectangular area covers the majority of the slide, obscuring any content that might have been there. The background is a solid blue color. A thin, light blue curved line starts from the top left and extends towards the top center. On the right side, there is a vertical blue bar with a white diagonal line running from the top right to the bottom left. The text "Two plane dissection" is centered at the bottom of the slide in a white serif font.

Two plane dissection

# High SMAS Dissection

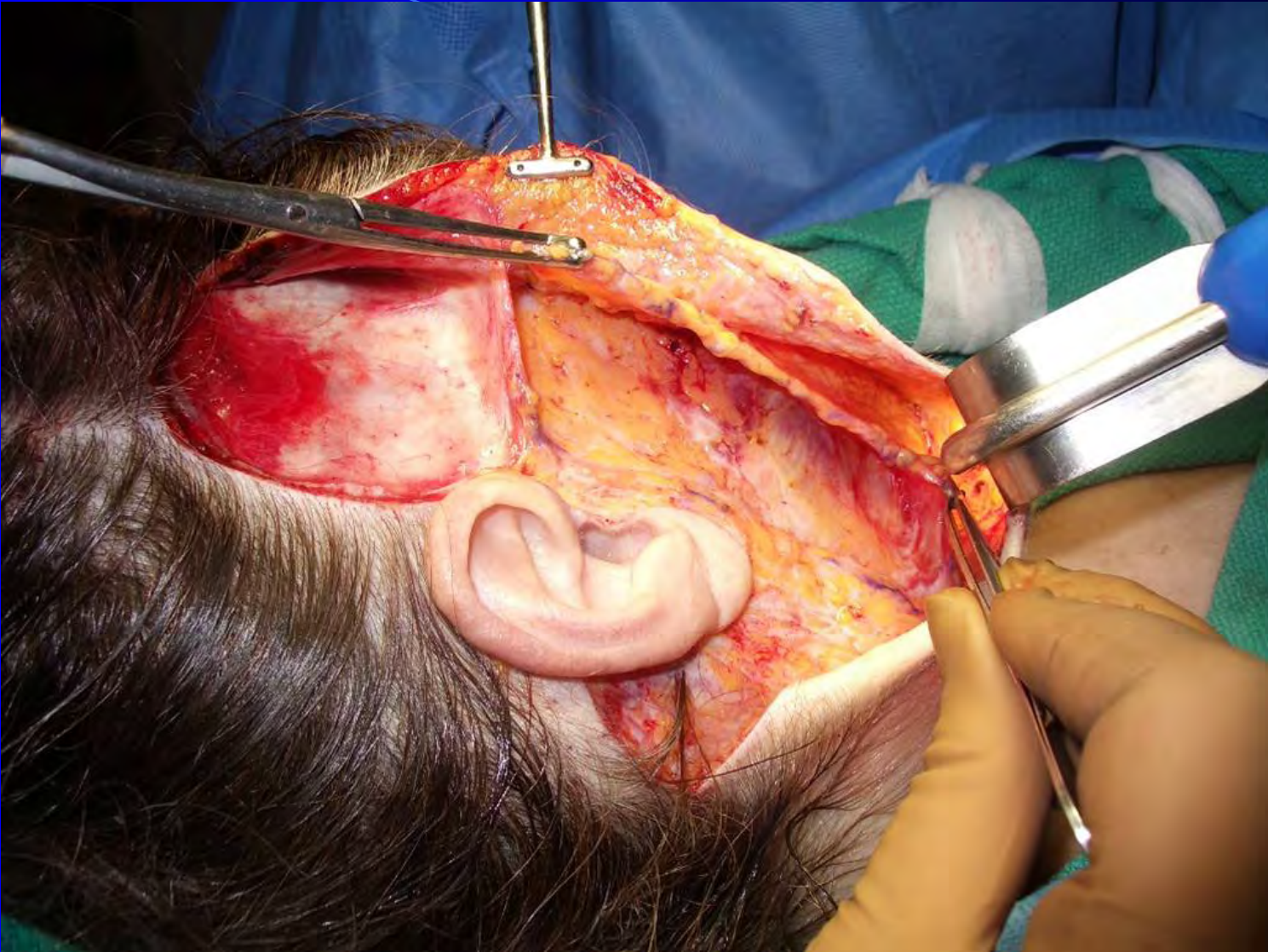
- | **Begin dissection at upper border of zygomatic arch**
- | **Continue dissection to the corner of the eye with division of orbicularis muscle**
- | **Dissection is carried out over masseter muscle with visualization of VII nerve**



SMAS marking

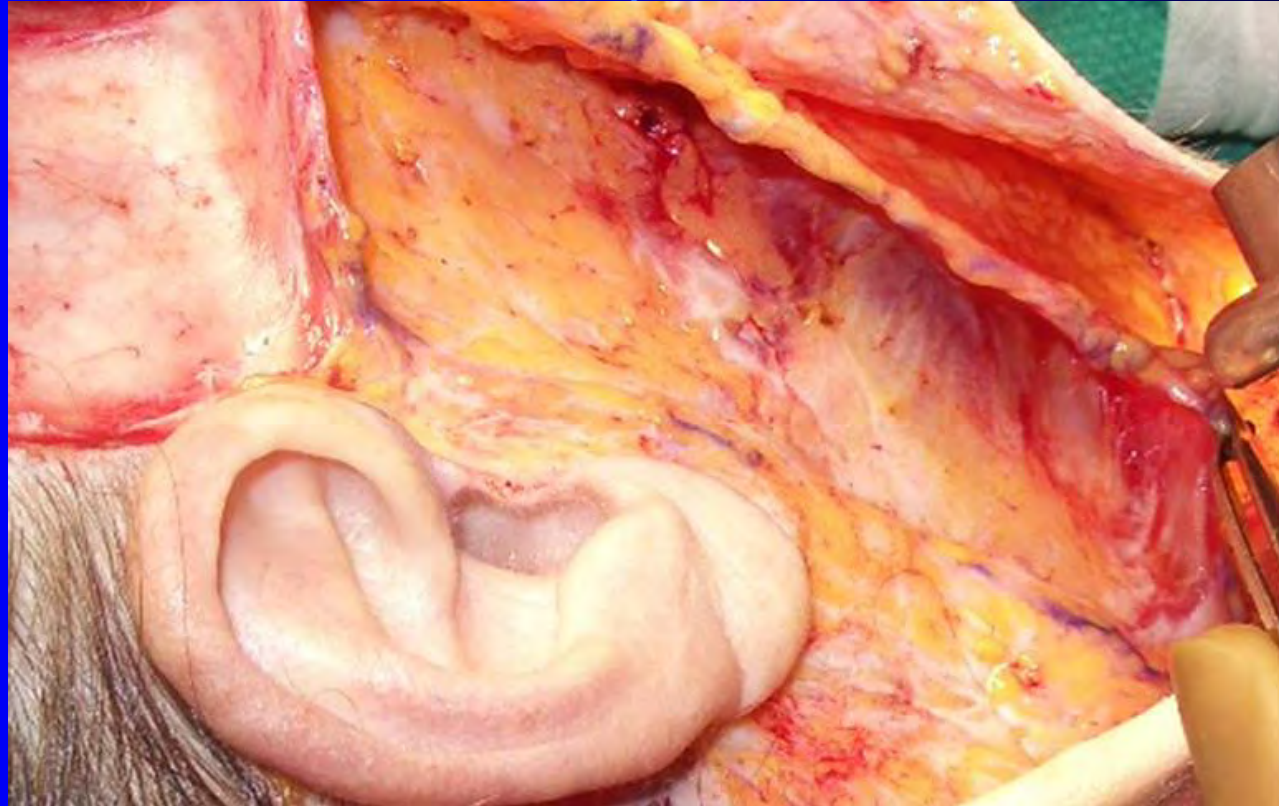


SMAS dissection

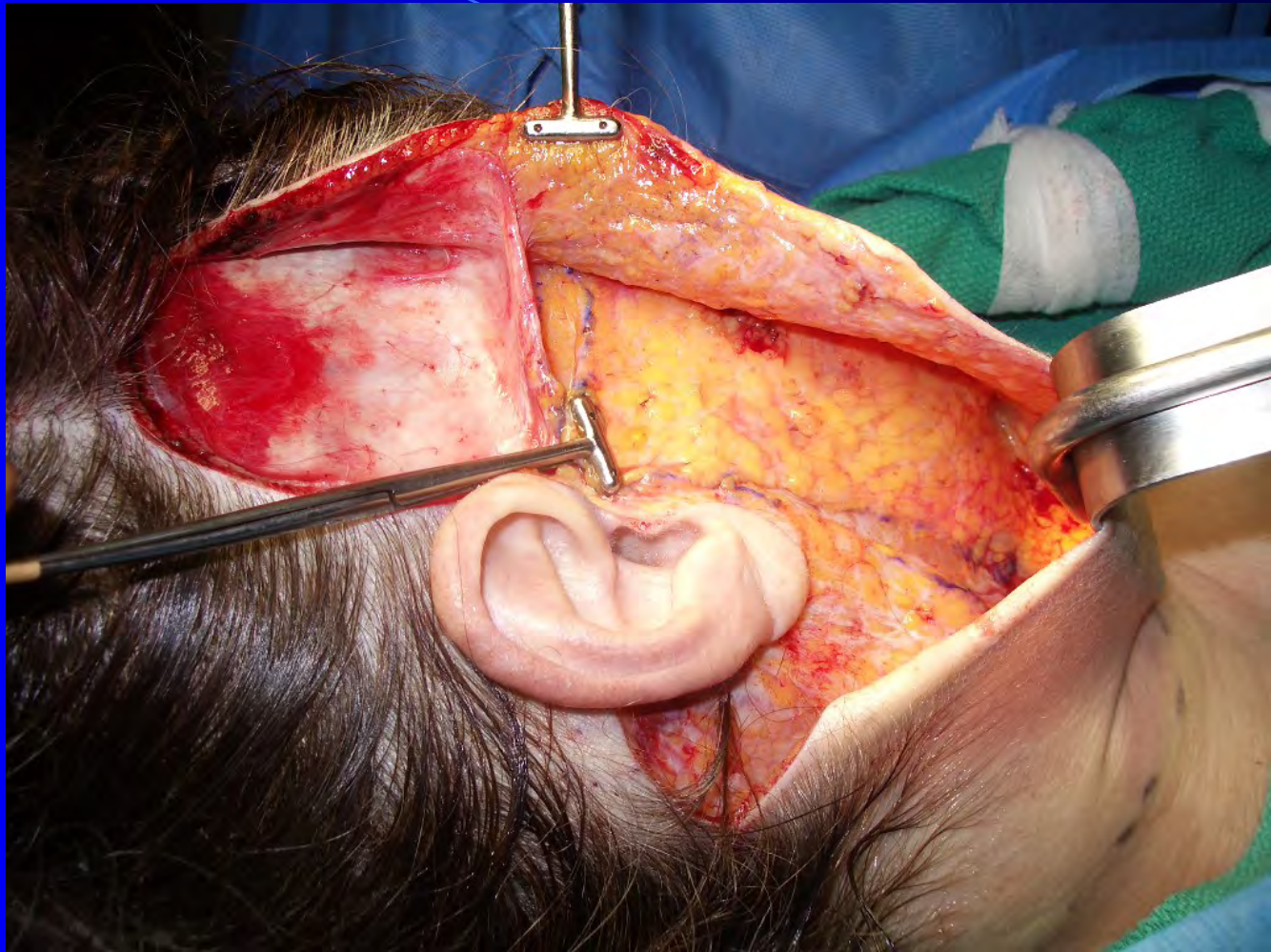


High SMAS-Platysmal Dissection



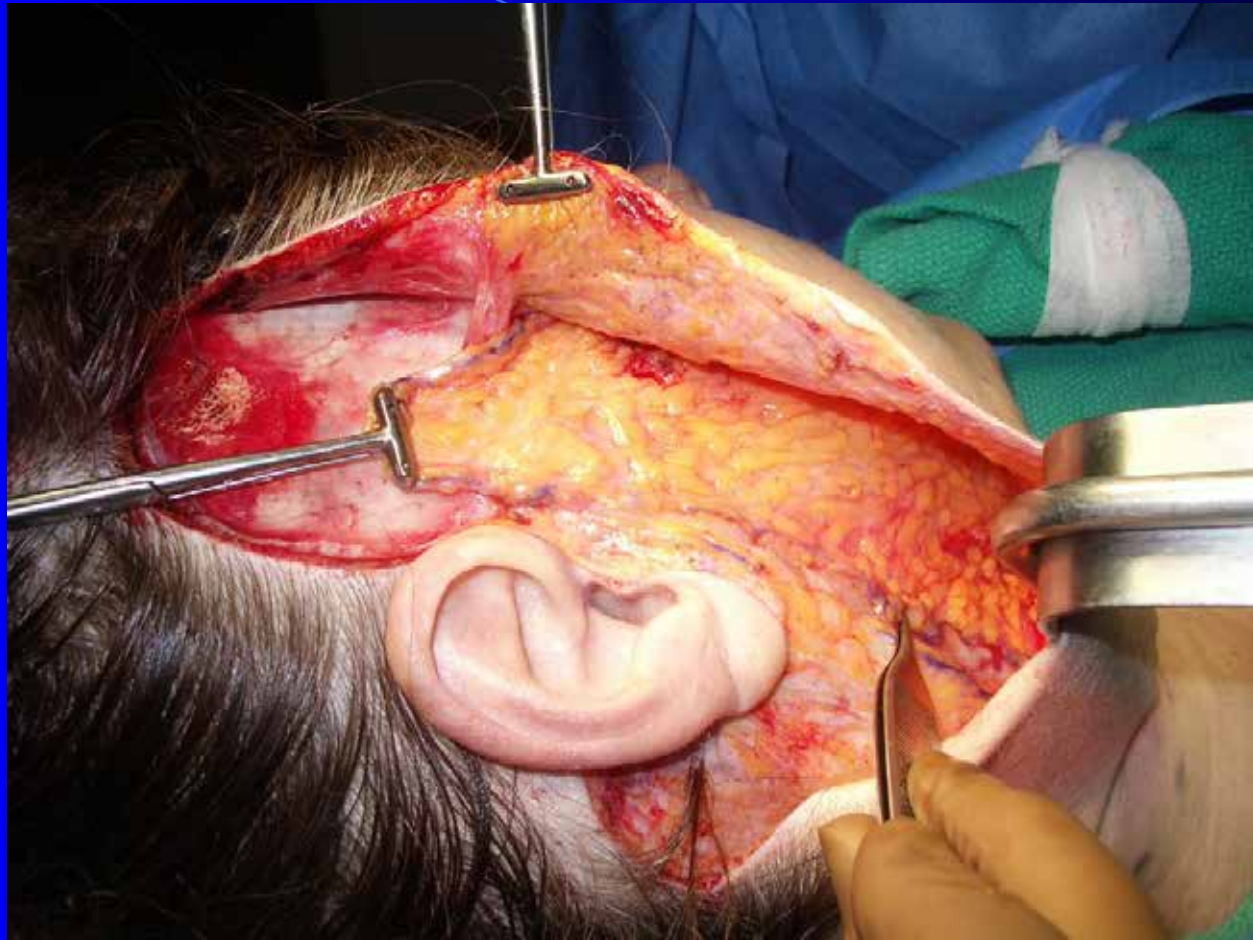


**Dissection over parotid and masseter**

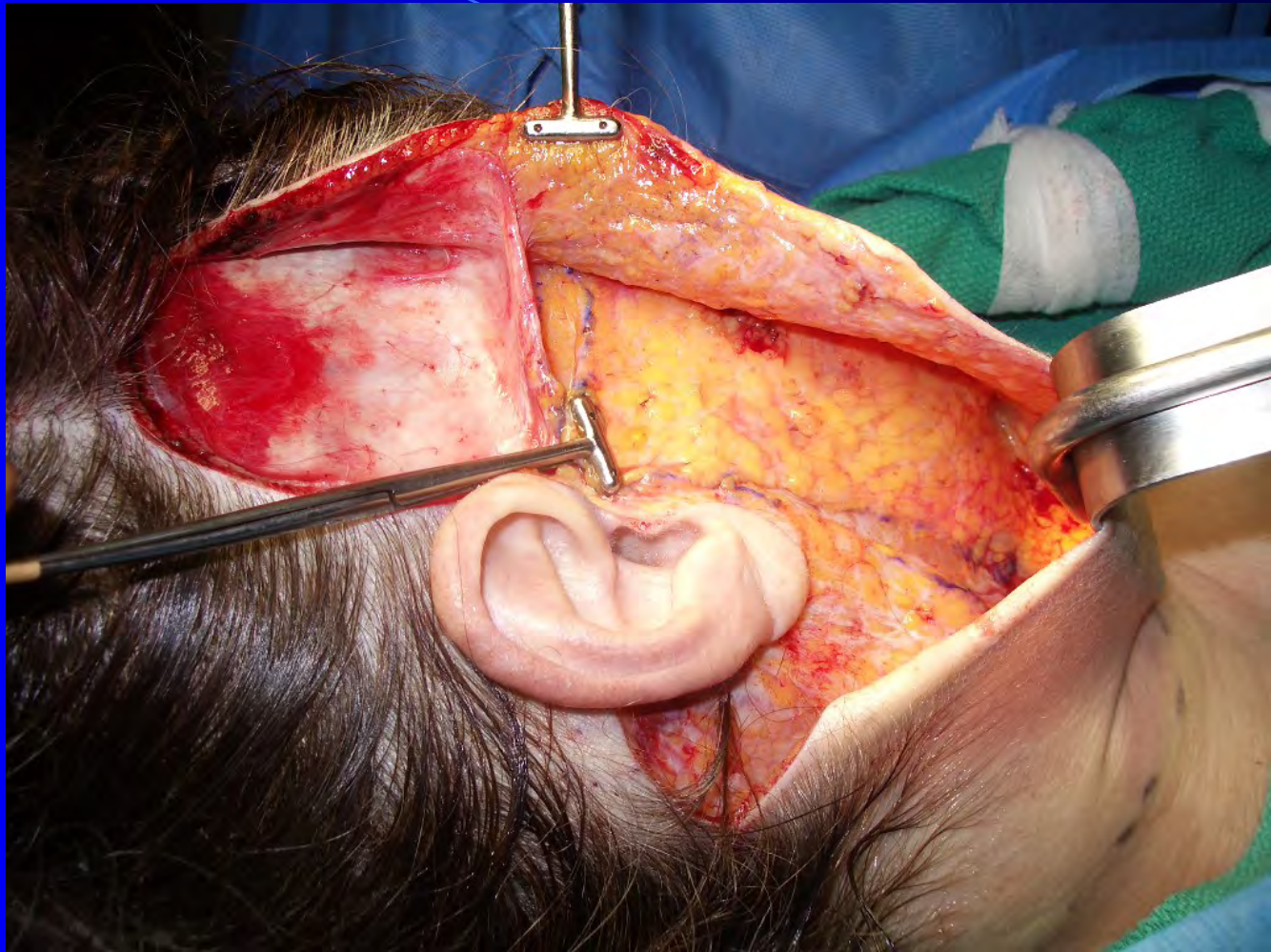


**SMAS dissection before elevation**



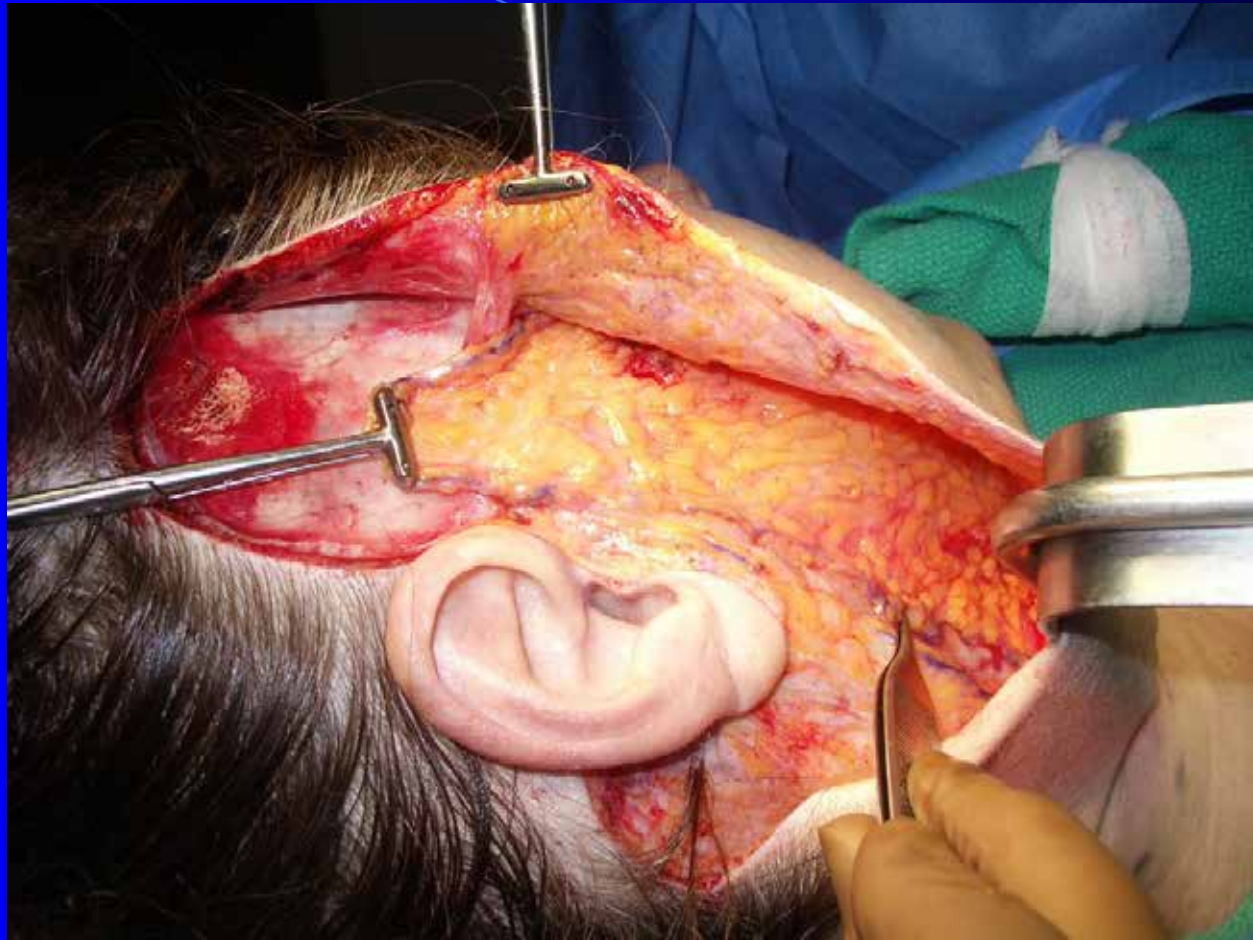


**2-3 cm vertical elevation of SMAS**

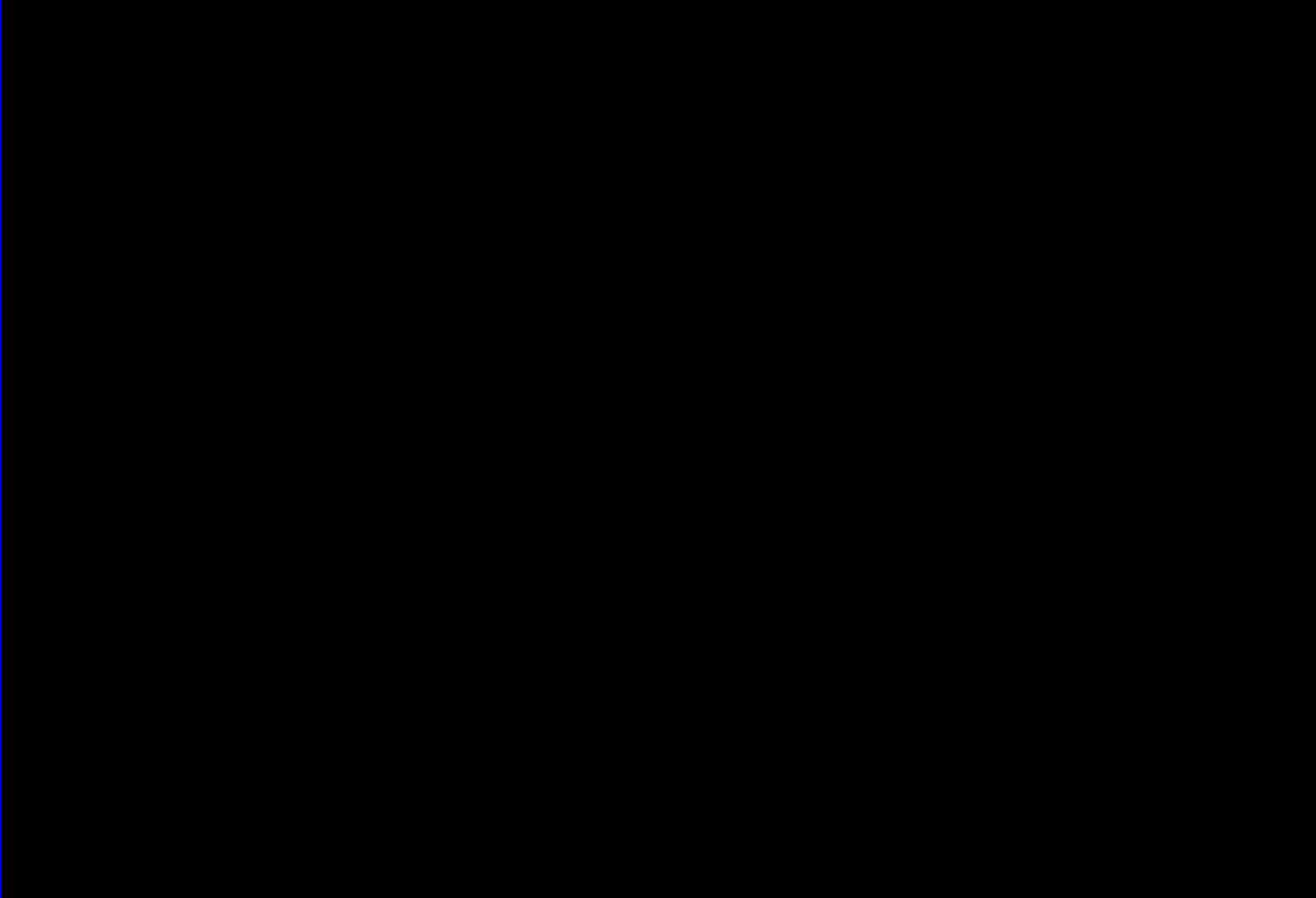


**SMAS dissection before elevation**





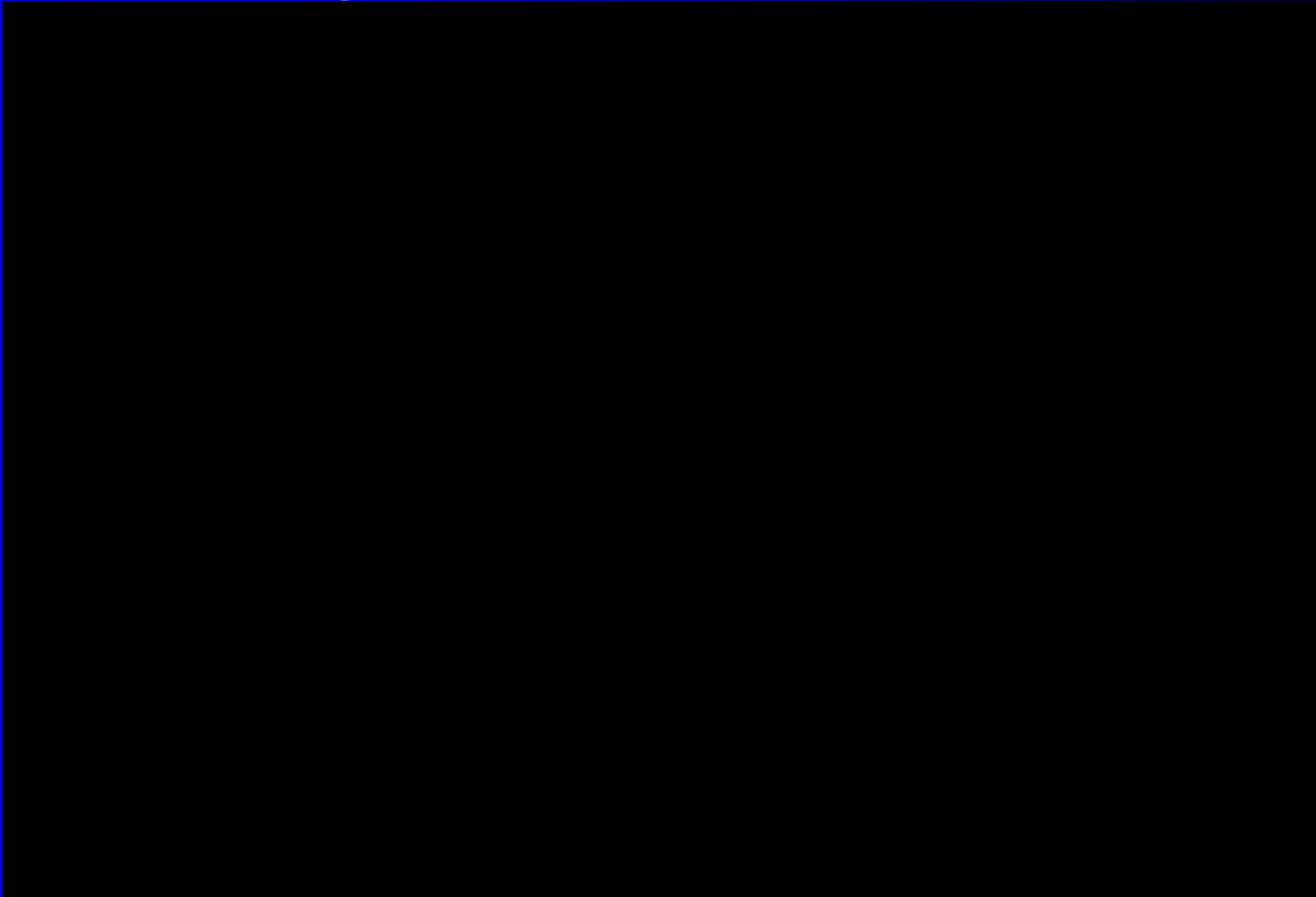
**2-3 cm vertical elevation of SMAS**



SMAS fixation



**SMAS fixation to deep temporal fascia**



Skin redraping





**Fixation of skin above and behind the ear**



**Trimming of occipital skin without tension**

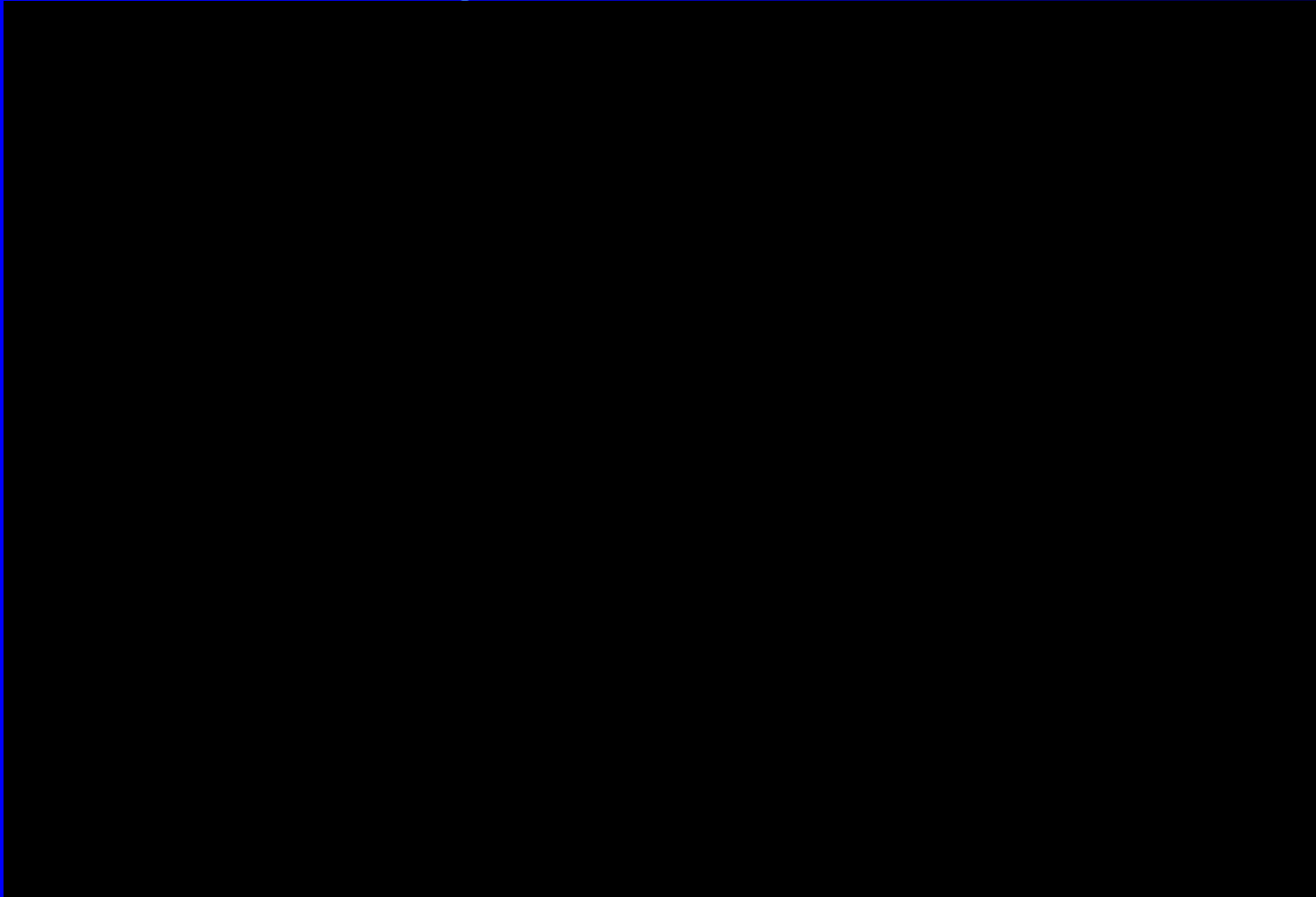




**Trimming of temple skin**



**Adjustment of pretragal skin with retrotragal inset**



Comparison





























# What about the Neck?

- | **I try to avoid a submental incision whenever possible**
- | **Division of platysmal bands from above when present, resection if severe**
- | **Submental incision and midline plication of bands and division when severe**
- | **Superior elevation and lateral fixation with 2-0 prolene**

# HIGH SMAS

## *Summary*

- | Allows for **vertical** pull of SMAS-Platysma complex
- | Vertical tension fixates directly to the deep temporal fascia
- | Allows for tightening of entire musculo-fascial corset of the face
- | Minimizes tension on the facial skin



# HIGH SMAS

## *Summary*

- | **Allows for rejuvenation of the central third of the face (*high arc of rotation*)**
- | **Safe dissection with knowledge that the facial nerve is deep at level of zygoma**
- | ***Softens* nasolabial fold and brings malar structures back to their normal position**
- | **Safe operation with predictable outcomes**



***Thank You!***



**San Francisco**



**Napa Valley**