HIGH DEFINITION FACE & NECK LIFT
USING TRIPLE-LAYERED Plication TECHNIQUE

(Review of 2000 CASES)

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Advances in medicine and technology
  * Increase life expectancy
  * Increase in number of active and healthier individuals

Aging leads to external facial changes that may not match the internal strength, and youthfulness felt by many individuals

Major surge in facial rejuvenation:
  Turn the clock back 10-15 years without the “pulled look”.
Skin Laxity

Aging Face

1. Skin
2. Subcutaneous
3. Musculo-aponeurotic
4. Retaining ligaments and space
5. Periosteum and Deep fascia

SMAS & Retaining Ligaments Laxity

Subcutaneous Volume loss
TREATMENT OF AGING FACE

SKIN RESURFACING

VOLUME REPLACEMENT

SMAS & Deep Tissue REPOSITIONING
FACELIFT TECHNIQUES

➢ Subcutaneous Facelift
➢ Plication Techniques
➢ Deep Plane Facelifts
SMAS PLICATION VARIATIONS

- Simple Interrupted
- Horizontal Mattress
- Purse String
- Figure-of Eight
- Running Locking Sutures
Early in my practice, I used various SMAS plication techniques.

1- Earlier than desired laxity of Jowl and neck tissue
2- Bunching and texture irregularities
**Evolution of My Technique**

Considering abdominoplasty plications technique

- A double layered plication of running mattress and interlocking sutures.
- Durable plication results, despite high abdominal forces.

I decided to apply this similar technique to my SMAS plications in 2005.
DOUBLE “C” Plication Marking on Cadaver

First Layer: horizontal running mattress Plication

Initial Anchoring Suture at 45 degree
DOUBLE “C” PLICATION MARKING ON CADAVER

First Layer: Horizontal running mattress Plication

Second layer: Running Interlocking Plication

Initial Anchoring Suture at 45 degree
THE "DOUBLE C" PLICATION TECHNIQUE

➢ Combination of a two layer SMAS plication
➢ First “C” shaped plication
  ➢ Horizontal running mattress
➢ Second “C” shaped plication
  ➢ Running interlocking
The Double “C” Plication Technique: A Reliable Technique for Lower Facial Rejuvenation: Review of 1500 Cases

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**Introduction:** Facial rejuvenation procedures have evolved significantly since they were first performed at the beginning of the 20th century. Modern SMAS lifting techniques focus on providing natural facial rejuvenation, durable results, fewer complications, and reduced morbidity. Many techniques exist, each proposing different methods to attain a common goal, re suspension of the SMAS. A simple new technique for SMAS plication of lower face and neck is introduced, called double “C” plication. This technique is reproducible and simple, creating lasting results for a natural look with a low complication rate.

**Materials and Methods:** In over 1500 facelifts in the last 4 years, the author has evolved a simple technique with a natural look. All cases were done with oral sedation and local anesthesia. Patients were ambulatory immediately following surgery and had a rapid recovery with little edema or ecchymosis. Nerve injuries were avoided, and the temple and temporal area are preserved. There are no ridges, dimples, or “joker lines.” Revision rate was less than 0.7%. This technique utilizes double running plicating sutures in a “C” shape pattern for SMAS suspension which can be placed via traditional or short-scar face-lift incisions. This technique provides an evenly distributed multi vector radial traction on the SMAS and lateral platysma, allowing for a more uniform suspension compared to traditional single plication and purse string sutures, which provide point specific tension. This SMAS plication technique tightens up the face just like le ffirm and smooth it up behind the ear anatomic point. Results: Over performed utilite technique of a retrospective practice included in the at 1.3% minor hem injury 0%, greater skin necrosis >2.

**Conclusions:** Reliable, simple, results and low of double running plication in a “C”

Lower face significantly beginning of the technique was provided by technique of treatment of the face and years considered superficial muscle literature. Modern SMAS lifting techniques focus on providing natural facial rejuvenation, durable results, fewer complications, and reduced morbidity. These

Developed in 2005
Published in 2011 AJCS
DOUBLE C PLICATION STUDY OF 1500 CASES

• Tightens SMAS in TWO layers
• The first 600 cases: 2.0 Mersilene Sutures for plication of both layers
  8% suture extrusion rate due to close proximity of the second layer to the skin
• The following 900 cases: substituted 2.0 Vicryl for both layers
  • No more suture extrusion
  • But more SMAS laxity recurrence compared to Mersilene
Triple-C SMAS Plication Facelift for Natural Facial Rejuvenation

Background: Various methods are used to repair the superficial musculoaponeurotic system (SMAS) during facelift procedures. This study presents a novel, modified, layered SMAS plication: the triple-C SMAS plication. This technique utilizes three concentric layers of SMAS to lift and tighten the deep structures of the face.

Methods: A prospective review was performed of patients undergoing the triple-C SMAS plication over 1 year. Patients with a length of follow-up of 12 months or longer were included. Study data included patient demographics, operative data, complications, and satisfaction rates.

Results: One hundred ninety-two consecutive patients underwent the procedure over a 12-month period. One hundred forty-five patients had follow-up data. Complications included a facial nerve palsy in 0.95%, major hematomas in 2.75%, seromas in 4.54%, minor acneiform rashes in 0.12%, and infection in 0.95%. Two revisions were performed (1.2%). Patient satisfaction was 96.4%

Conclusions: Traditional SMAS plication techniques are limited in their ability to lift and tighten the deep structures of the face. The triple-C SMAS technique represents a novel approach to lift and tighten the deep structures of the face.

INTRODUCTION

Facelift surgery represents the most powerful procedure in facial rejuvenation. Since the technique was first described at the turn of the 20th century, facelift surgery has undergone a series of clinical refinements. SMAS techniques are the basis for many of these refinements. Since the introduction of SMAS techniques, the concept of lifting and tightening the deep structures of the face has become the foundation of facelift surgery. Lateral and midface tightening are critical components of a well-performed facelift.

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EVOLUTION OF “C” PLICATION

TRIPLE C PLICATION 2000 CASES

• Tightens SMAS in THREE layers
• Combination of 2.0 Mersilene and 2.0 Vicryl Sutures
• Deep layer Mersilene and the superficial layers Vicryl sutures
• No suture extrusions
• long lasting results
TRIPLE “C” Plication Technique

Third Layer
Running locking
Sutures: 2.0 Vicryl

Second layer:
Running mattress using 2.0 Vicryl sutures

First and deepest layer:
Multiple interrupted sutures using non-absorbable sutures (2.0 Mersilene)
SMAS PLICATION APPLICATION

Applies gradual increase in SMAS tension from temple down to the neck area
• Low tension in cheek area,
• High tension in the Jawlines and neck area
  • sharper jaw lines
  • very tight neck

For men, I incorporate some of the neck tissue to the angle of mandible and jawlines for more masculine look
PLICATION VECTORS

➢ This technique provides a multi vector radial traction force on the SMAS and neck tissue.

➢ Creates a more uniform suspension with less bunching compared to the traditional plication sutures which only provide point specific tension.
THE TRIPLE “C” PLICATION TECHNIQUE

Triple C plication laces the face & the neck up just like a boot, making the entire lower face and neck firm and youthful.

The neck plication pulls the tissues up behind the ear keeping the earlobe up in its normal position.
FIRST LAYER INTERRUPTED SUTURING

PRS 2021
SECOND LAYER:
RUNNING MATTRESS SUTURES

PRS 2021
THIRD LAYER: INTERLOCKING RUNNING SUTURES
ANESTHESIA CHOICES FOR
FACIAL REJUVENATION

• **General Anesthesia**
  - Not ideal for older patients with multiple medical conditions
  - Increase peri and post operative complications
    - DVT, PE, Aspiration Pneumonia, bleeding, N&V
  - Ideal for Multiple procedures/ long surgery >4 hours
  - Ideal for super anxious patients

• **Local Aesthesia & Twilight Sedation**
  - Ideal for any age, especially older individuals
  - Not just for mini facelifts
  - Less peri and post operative complications
    - DVT, PE, Pneumonia, NV
  - Limited to few procedures /cases
  - Short surgery <4 hours
  - Suboptimal for very anxious patients
➢ Twilight sedation

➢ Warm local anesthesia infiltration of dilute 1% Lidocaine, 0.25% Marcaine, Sodium Bicarb, and TXA mixed with saline solution.

➢ 120-150 cc of mixture infiltration

➢ Submental Liposuction/ Platysmaplasty

➢ Adequate flap elevation
MARKING & Plication of SMAS
In 2008 at Georgetown University (department of Otolaryngology and department of Mechanical and Aerospace Engineering) the biomechanical properties of two different suture techniques for SMAS plication were tested on pig skin.

1- Double-layered running locking (DRL) stitches
2- Multiple horizontal mattress stitches.

Conclusion of biomechanical studies:

1. The Double-layered Running Locking Technique requires more force than the horizontal mattress technique to cause significant failure of plication.

2. A Double-Layered Running Locking technique may enable plastic surgeons to avoid early revision rhytidectomy due to suture failure, and to create a long-lasting, youthful cosmetic result.

FACELIFT CANDIDATES

- Ideal candidate

- Suboptimal candidate
LOWER FACE AND NECK LIFT ONLY
COMBINED WITH OTHER PROCEDURES
COMBINED WITH OTHER PROCEDURES
ETHNIC CASES
ETHNIC CASES
LONGEVITY

12 years
Initial Facelift 2008
Second Facelift 2018