This case study reviews the surgical rejuvenation strategy for a healthy 58 year old female who previously underwent upper and lower blepharoplasty. The patient complained of an aging neck and low brows and desired a natural look that did not appear pulled or tight. The surgical plan selected included a limited SMAS dissection facelift and endoscopic brow-lift.

Case Overview

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Background

Achieving a natural appearance following a facelift procedure requires a carefully planned and executed surgical strategy. In a standard facelift, tissue is lifted and then secured under tension. This tension can lead to suture pull-out or tissue creep, early relaxation and a less desirable long-term outcome. Several strategies are employed to optimize outcomes in patients undergoing a facelift. One strategy is to “overtighten” the SMAS hoping that relaxation or tissue creep will achieve the optimal more natural outcome over time. Another strategy for anchoring the SMAS, first popularized by Stuzin, proposed the use of a rolled-up Vicryl mesh or extra SMAS to reinforce the suture line.

This communication describes the use of a fully resorbable poly-4-hydroxybutyrate (P4HB) mesh, GalaFLEX® mesh (Galatea Corp.) with a long strength retention profile as a tool to help reinforce the lifted SMAS and improve stability of the lift. Overcorrection and cheese-wiring are minimized and the initial surgical result is more effectively maintained in the long term.

Key Points

- Helps increase stability of the facelift by reinforcing the lifted SMAS
- Alleviates the need for over-tightening
- Conforms to facial contours
- Assists with longevity of the facelift outcome in patients with variable quality of the SMAS layer
GalaFLEX resorbable mesh can be used to stabilize the SMAS imbrication or plication.

The procedure was initiated with the injection of 1% lidocaine with 1:100,000 epinephrine. GalaFLEX is presoaked in antibiotic solution prior to placement.

Pre-auricular, post-auricular and temporal incisions are made and a skin flap elevated using facelift scissors. After raising the skin flap, the SMAS layer is assessed. Figure 1 shows the minimally dissected SMAS with appropriately sized P4HB mesh. Once dissected the mesh can be sutured onto the SMAS flap and the SMAS flap advanced cephalically over the zygomatic arch Figure 2.

When suturing GalaFLEX into position it is important to make sure the mesh lies flat over the SMAS flap. The woven mesh can be cut using scissors without the edges unraveling.

Figure 3 shows the resorbable P4HB mesh sutured to the SMAS flap with multiple interrupted 4-0 long-term resorbable sutures. At least 6 sutures should be used when suturing GalaFLEX onto the SMAS flap. We place a suture at each corner and then at least two sutures in the center of the mesh. If any of the edges are sitting up they should be sutured down using 5-0 resorbable suture.

It is not advisable to use a running suture as this may tend to buckle the mesh. If edges are left sitting up they may be palpable postoperatively. Prior to closure GalaFLEX should be irrigated with antibiotic solution.
Patient Follow-Up

- Pre-Op Frontal
- Four Months Post-Op Frontal
- Pre-Op Side
- Four Months Post-Op Side
**Key Technical Points**

1. Discuss use of GalaFLEX with the patient prior to implantation.
2. Soak GalaFLEX in antibiotic solution prior to use. We typically use 400 mg of Ciprofloxacin in one liter of saline.
3. Cut GalaFLEX to size that precisely fits the area of SMAS plication or imbrication. The mesh is used to reinforce the SMAS imbrication or plication. In facelift cases we used a size measuring approximately 1.5 cm to 2 cm in width by 3 cm to 4 cm in length.
4. Use multiple long-term resorbable sutures preferably 4-0 MonoMax sutures (B. Braun). 4-0 PDS sutures can be used as well. 5-0 resorbable suture can be used to make sure GalaFLEX margins are flat.
5. Make sure GalaFLEX is not placed too close to any incisions.
6. Make sure GalaFLEX is laid flat over the SMAS layer to prevent visible or palpable edges of the mesh.
7. Irrigate GalaFLEX with antibiotic solution just prior to closure.
8. Do not place drains too close to GalaFLEX.

**Discussion**

The move toward less invasive facelift operations has fostered a rush to new technologies to improve outcomes. One of the problems with less invasive operations is early relaxation and recurrence. In many cases the recurrence may be due to loosening of the SMAS suspension. Early data reveals that the use of resorbable mesh could improve outcomes with less invasive facelift operations. Further study will be necessary to determine long term outcomes in patients with GalaFLEX resorbable mesh.

**References**


**Rx Only.** Before using GalaFLEX mesh read the instructions for use which accompany the product for indications and a more comprehensive list of contraindications, warnings and precautions.