Surgical Pearls

Short-Incision Midface-Lift in Lower Blepharoplasty

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In this retrospective review of 80 cosmetic, short-incision midface-lift (SIML) procedures performed by 2 surgeons at 2 institutions, lay observers, masked to the type of intervention and not with acquainted with either surgeon, graded standardized and side-by-side preoperative and postoperative photographs using a grading system to evaluate malposition, distortion, asymmetry, contour, and scar (MDACS system) (Figure).1

Operative Technique

With the patient under local anesthesia with or without intravenous sedation, a subciliary incision is fashioned from the mid-pupil to 5 mm past the lateral commissure (Video). Skin is dissected from the underlying orbicularis. The lateral orbicularis muscle is incised and bluntly dissected from the septum. An inferior orbital rim supraperiosteal dissection pocket is created with sharp and blunt dissection. The orbitomalar ligament is disinserted, and the preseptal and supraperiosteal planes are connected, achieving mobilization of the midface. Herniated orbital fat (if any) is excised or draped into the supraperiosteal pockets. A canthopexy or canthoplasty is performed; the latter if significant horizontal laxity is evident with eyelid distraction testing. The orbicularis flap is advanced in a superolateral direction and sutured to the lateral rim periosteum or temporalis fascia with a 4-0 polypropylene suture. Skin is resected conservatively and closed with 7-0 polypropylene suture.

Results

A total of 65 women (81%) and 15 men (19%) were included. Ages ranged from 28 to 86 years (mean age, 57 years). The follow-up ranged from 3 to 24 months (mean, 6 months). Complications were few and included 4 cases (5%) of lateral “mounding” treated with elliptical excision and repair. One eyelid receiving canthopexy developed mild ectropion later treated with a lateral tarsal strip. There was no other eyelid malposition or serious complication. The MDACS system grades were as following: 54 patients (83%) had a grade of excellent; 11 (17%), a grade of good; and none had a grade of mediocre or poor.

Discussion

The SIML was associated with good to excellent aesthetic results and few complications (Figure). These data corroborate the findings of Hester et al,2 who stated that lower eyelid blepharoplasty can be improved with orbicularis preservation, minimal fat resection, orbital retaining ligament release, lateral canthal support, and minimal skin removal. Our technique achieves these via a shorter incision than previously described and may further improve the results and safety of surgical rejuvenation of the lower eyelid and cheek.2-7

Supraperiosteal tissue release may offer both functional and aesthetic benefits. The midface advancement flap supports the eyelid and counteracts retraction. Canthal stabilization (canthopexy or canthoplasty) may also be key to good lower eyelid position postoperatively. Aesthetically, the soft-tissue release reduces the palpebromalar groove to achieve a desirable single convexity midface, as previously described.2-7

The medial orbital rim dissection with SIML is conservative and away from the infraorbital nerve. In addition to less hypesthesia risk, we surmise that inferior oblique injury is less likely because medial orbital fat is not dissected. Nevertheless, good improvement of the medial tear trough deformity was achieved owing to tenting and...
tightening of anterior lamella tissues after lateral anchoring of the skin-muscle flap. Further research may further elucidate the impact of manipulating medial fat or not in reducing medial eyelid-cheek grooves during these procedures.

The SIML remains an incisional surgical procedure with inherent risks. In this series, the functional complications were few and easily managed. One notable negative aesthetic sequela was “mounding” of the lateral soft tissues owing to imbrication around the flap-anchoring site. A subsequent elliptical excision was effective, as previously described.

Limitations of the study were the noncontrolled, retrospective nature. In addition, the follow-up was modest, at months to years. In conclusion, SIML was safe and effective in this series.

REFERENCES


