Aesthetic Abstracts and Citations
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In this Aesthetic Abstract and Citations section, we highlight and briefly discuss recently published manuscripts from other peer-reviewed journals that may be of interest to our readership in oculoplastic surgery. These are just cursory reviews to peak an interest on subjects, which the individual reader may desire to pursue in more detail by reading the manuscript in full.


How to manage the orbicularis muscle in upper blepharoplasty (excision vs. preservation) is an ongoing topic of debate within and across the core aesthetic specialties. The authors of this report advocate orbicularis excision and then suture closure which they feel promotes formation of a fine crease and corrects for eyelid crease/fold asymmetries. They retrospectively reviewed the charts of 50 patients who underwent this blepharoplasty variant and noted a 98% patient satisfaction rate with no complications. One patient (2%) desired additional fat excision (not considered a complication) and was satisfied after revision. Final follow up was at 2 months and was considered long term as no variables studied changed after this time (no mention as to variables studied). The authors detail in the discussion that they feel eyelid aging leads to lax/excess upper eyelid skin, muscle, and septum. They stress that the crease is formed by the adhesion of the postorbicularis fascia, the levator aponeurosis, and the orbital septum at the upper tarsus. If muscle is not excised and resecured, “bulging” will persist and adversely affect the height and depth of the upper eyelid fold.

Message: The article merits attention whether one agrees or not with the premise as it is another in line of publications which considers the merits or problems with orbiculcetomy during upper blepharoplasty. This reviewer believes crease/fold asymmetries can be equally corrected with appropriate skin excision, with or without (depending of findings) formal crease formation (supratarsal fixation) irrespective of orbiculcetomy. This manuscript details a monoclastic perspective which many in our society will disagree with, especially those who favor comprehensive volume preservation. The description of eyelid aging and crease anatomy warrant clarification. Figure 8, a male blepharoplasty has developed a nasal sulcus hollow after surgery (A-frame deformity) which may have been prevented with muscle/fat preservation. In the end, 98% of patients were happy with their outcome which is really all that matters. For a relatively current literature review on the subject of orbicularis excision versus preservation in upper blepharoplasty, please refer to the article by Hoornije et al. (Resecting orbicularis oculi muscle in upper eyelid blepharoplasty: a review of the literature. *J Plast Reconstr Aesthet Surg*. 2010;63:787–92).


This article provides an excellent review of our current understanding of surgical temporal anatomy documented from fresh cadaver dissection of 24 hemifaces (13 males and 11 females with an average age of 72 years). In addition, the complex and confusing nomenclature referenced in the literature regarding the various fascial layers of this area is documented. The authors elaborate on the anatomical continuity of the scalp’s (superior nuchal line to eyebrows) 5 layers (layer 1: skin, layer 2: subcutaneous tissue, layer 3: galea aponeurotica, layer 4: loose areolar tissue, and layer 5: periosteum) to the temple region, and emphasize how the deeper layers (3, 4, and 5) of these anatomical segments transition and change in name. Previous descriptions have provided so many different names for these layers that it has been hard to follow. The author’s description is clear, concise, and provides clarity. For example, layer 3 (galea aponeurotica) of the scalp transitions in the temple as the superficial temporal fascia (an important anatomical structure which has 14 given names in the literature—all provided in a table). The same is provided for layers 4 and 5. In addition, the ligamentous structures that traverse layers 5 to 3 (deep to superficial), and are important surgical barriers and landmarks, are described in detail. These include the conjoint fascia, the temporal ligamentous adhesion and the lateral orbital thickening. The varied other names previously given to these structures in the literature are also provided in table form. Finally, the temporal zone is anatomically separated into upper and lower compartment with descriptions of safe and unsafe areas of surgery in relation to the facial nerve.

Message: An excellent article which is a must read for all who perform surgery in the temporal region (i.e., endoscopic brow lifting). As there is so much information in the body of the text, I only highlighted some important points of reference. This article will require reading 4 to 5 times to get the full gist of the data presented and is well worth the time put in. I recommend this highly.


The authors argue that with appropriate technique, routine canthal suspension is not needed in traditional transcutaneous lower eyelid blepharoplasty in which skin is excised and fat excised or repositioned. They retrospectively reviewed the charts of 3,014 patients who underwent lower blepharoplasty over a 30-year period. Excluded from study were patients who needed canthal suspension because of preoperative eyelid laxity (only 31 patients or 1.03%), revisional surgery or for the treatment of congenital disorders or trauma, or patients who underwent transconjunctival surgery. In total, 2,007 patients underwent transcutaneous surgery without canthal suspension and were included in the report. The mean patient age was 55 years, and 88% of patients were female. The 2 nonsenior authors (S.C. and
The authors retrospectively analyzed the results of surgery on 150 patients who underwent various procedures aimed at midface rejuvenation over a 4-year period from 2007 to 2010. Procedures performed included autologous fat grafting (21.3%), endoscopic midface lifting (32.7%), implantation of malar implants (2.7%), extended lower blepharoplasty (transcutaneous) with fat transposition (46.7%), and deep-plane rhytidectomy (32%). The authors developed a classification system based on the major factors underlying midfacial aging (identified on preoperative examination) to help develop the surgical plan. The system categorized patients according to volume loss and midface ptosis: class I (mild), class II (moderate), and class III (severe). Subclasses were added for midface skeletal projection: a) normal, b) deficient (vector negative). More than 1 procedure was performed in 34% of patients, and approximately 21% of patients had previous facial rejuvenation surgery. Results were assessed by patient satisfaction and further by masked assessment (from photographs) by an independent expert (facial plastic surgeon) with greater than 15 years of experience, both at 12-month follow up. Ninety-three percent of patients studied were woman with an average age of 51 years. Lower blepharoplasty was extremely successful in improving the lower eyelid/midface interface in the appropriate patient (class I and II). Malar implants (only 4 patients) yielded no patient dissatisfaction. Fat grafting, on its own, yielded a high dissatisfaction rate (33%) and was better suited as an adjunct to other procedures. Isolated midface lifting yielded a 14% dissatisfaction rate, which rose to 25% when added to lower blepharoplasty with fat transposition or fat grafting. The overall patient dissatisfaction rate was 14%, was in concordance with surgeon's and independent expert's assessment, was more common when the patient decided on a different surgical plan than the surgeon's suggestion (38% of these patients), and was most often noted when there was preexistent malar skeletal deficiency (subclass B) and more significant loss of tissue elasticity (class III >> class I and II). Based on the results to this study, the authors developed a treatment algorithm for use in midface aesthetic assessment. The flowchart is presented as Figure 5 in the article.
Message: I commend the authors on this undertaking. There is a tremendous amount of data, and they have done a good job making sense of it. The take home pearls are that appropriate midface rejuvenation requires a detailed preoperative assessment of volume status, tissue elasticity, and skeletal projection. It is important to not stray from the surgeon’s suggestions based on these findings as this led to a high incidence of patient dissatisfaction. Surgery is often multimodality in nature. Fat grafting is unpredictable and tends toward better results as an adjunct than primary procedure. Fat preservation in lower blepharoplasty yielded excellent results in the right patient, and midface implants are probably underutilized in surgery. The authors emphasize that dissatisfaction may be more a consequence of premorbid severity of the problem than the procedures themselves. Take some time to review the classification system and flowchart presented. They are helpful.