Original Article: Clinical Science

American Academy of Cosmetic Surgery

The American Journal of Cosmetic Surgery
1–4

DOI: 10.1177/0748806820985333
journals.sagepub.com/home/acs
SAGE

Combined Upper Blepharoplasty With Upper Eyelid Filler Injection

Mehryar Ray Taban, MD, FACS[1,2]

Abstract

To describe our experience with treating upper eyelid aging with combined upper blepharoplasty and upper eyelid hyaluronic acid gel filler injection. Retrospective analysis of patients with upper eyelid aging (including skin laxity/excess and fat deflation) undergoing combined upper blepharoplasty and upper eyelid hyaluronic acid gel filler injection by one surgeon. Minimum follow-up time was 3 months. Preoperative and postoperative photographs at longest follow-up visit were evaluated by blind observers. Patient satisfaction was recorded using questionnaire and phone call. A total of 40 patients (34 females, 6 males) underwent combined upper blepharoplasty with upper eyelid hyaluronic acid gel filler injection. Mean age was 43 years old (range: 26-75). All patients reported satisfaction with the surgical outcome, with no complications. 6 patients received additional touch-up filler injection postoperatively. One patient underwent additional skin removal. Upper blepharoplasty and upper eyelid hyaluronic acid gel filler injection can be safely and effectively combined together to treat upper eyelid aging for more youthful results.

Keywords

upper blepharoplasty, hyaluronic acid gel, eyelid filler, upper eyelid filler, cosmetic eyelid surgery

Cross-linked hyaluronic acid gel has been commercially available for soft-tissue augmentation in Canada and Europe since 1997 and was approved for use by the U.S. Food and Drug Administration in December 2003.[1] In addition to its cosmetic use in filling facial rhytids, it is widely used to treat under eye hollowness (aka tear trough deformity) and/or to camouflage under eye fat prolapse or "bags."[2,3] We have also previously published its benefit in treating upper eyelid deflation and hollowness, either genetic or age-related.[4]

Upper eyelid aging can consist of upper eyelid skin laxity/excess, upper eyelid fat loss, or both. Upper blepharoplasty alone only treats the skin laxity without addressing the fat loss, with potentially creating more skeletonized eye appearance. Upper eyelid fat loss can be treated with either autologous fat injection or filler injection.[4-8]

Herein, we describe the author's experience to address upper eyelid aging with combined upper blepharoplasty and upper eyelid hyaluronic acid gel filler injection for more youthful results.

Methods

In this retrospective study, charts of consecutive patients undergoing combined upper blepharoplasty (for excess upper eyelid skin) and upper eyelid hyaluronic acid gel filler injection (for upper eyelid hollowness or superior sulcus deformity) were reviewed. All surgeries were performed by one surgeon (M.R.T.) in private practice from January 2018 to June 2020. Informed consent was obtained for each procedure and the review adhered to the standards of the Declaration of Helsinki and was compliant with the Health Insurance Portability and Accountability Act, adherent to IRB approval standards. Written consent for publication of clinical photographs was also obtained from each patient and kept on file.

The surgical procedure started with preoperative skin marking for upper blepharoplasty followed by upper eyelid hyaluronic filler injection[4] (in seated position using needle technique, deep plane along the bony rim in retroseptal plane) followed by upper blepharoplasty (in supine position) which included upper eyelid skin removal with or without nasal fat pad debulking. The orbicular muscle is left intact except small incision medially if removing nasal fat pad.

Preoperative and postoperative photographs at longest follow-up visit were used for analysis. All photographs were obtained by the author (M.R.T.) using a standardized technique

[1]Private Practice, Beverly Hills, CA, USA
[2]David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Corresponding Author:
Mehryar Ray Taban, Private Practice, 9735 Wilshire Blvd., Suite 319, Beverly Hills, CA 90212, USA.
Email: doctor@TabanMD.com

in the frontal position with the eyelids open and facial muscles relaxed. Blind observers analyzed the photos. Patients without digital preoperative and postoperative photographs for review were excluded from the study. Patients with less than 3 months follow-up were also excluded. Patient satisfaction was recorded using questionnaire. In addition to customary questions/examination between the patient and the surgeon, a phone call was placed by the surgical coordinator to the patient after the latest postoperative follow-up appointment.

Results

A total of 40 patients (76 eyelids as 36 patients bilateral and 4 patients unilateral) underwent successful combined upper blepharoplasty with upper eyelid hyaluronic acid gel filler injection (average 0.35 cc each side). There were 34 females and 6 males, with mean age of 43 years old (range: 26-75 years old).

The average follow-up after surgery was 6 months (range of 3 months to 2 years). Subjective patient satisfaction was very high in all cases. There were no complications. 6 patients received additional touch-up filler injection postoperatively (2-3 months post). One patient underwent additional skin removal. Representative examples are shown in Figures 1 to 5.

Discussion

To restore upper eyelid youthfulness with the ideal aesthetic outcome, it is important to understand and treat each component of the aging process. That includes both upper eyelid skin laxity/excess and fat loss. Upper blepharoplasty can effectively treat upper eyelid skin laxity/excess but alone, it may lead to skeletonized eye appearance. It is important to address the volume deficit to obtain the best youthful and natural results. The 2 treatment options for adding volume to upper eyelids are autologous fat transfer and hyaluronic acid gel filler injection,[4-8] besides medial fat transposition which only partially adds volume in medial segment.[9] Each has its pros and cons. Autologous fat transfer tends to be much less predictable and precise than filler injection due to the fact that many transferred fat cells will not survive due to lack of blood supply. Furthermore, autologous fat is essentially irreversible or requires surgical intervention if it results in unsatisfactory lumps. Autologous fat transfer also has much longer healing time. Hyaluronic acid gel injection is much more predictable, precise, reversible, with quicker recovery; its main disadvantage is having shorter lifespan.

The aesthetic results of our study were highly satisfactory. The technique of combined filler injection and upper blepharoplasty is critical in achieving safe and effective results. There is a learning curve to be able to perform both procedures concurrently although upper eyelid filler injection does not necessarily has to be done at the same time as upper blepharoplasty; it can be done prior to surgery or after healed

Figure 1. A 39-year-old female, with upper eyelid aging, underwent combined upper blepharoplasty and 0.4 cc upper eyelid hyaluronic acid gel (Belotero Balance by Merz Aesthetics) injection each side. Note quick recovery and youthful results. (A) Preoperative and daily 1 week recovery (top left before; second left postop day 1; third left postop day 2; bottom left postop day 3; top right postop day 4; second right postop day 5; third right postop day 6; bottom right postop day 7). (B) Preoperative and 3 months postoperative photographs.

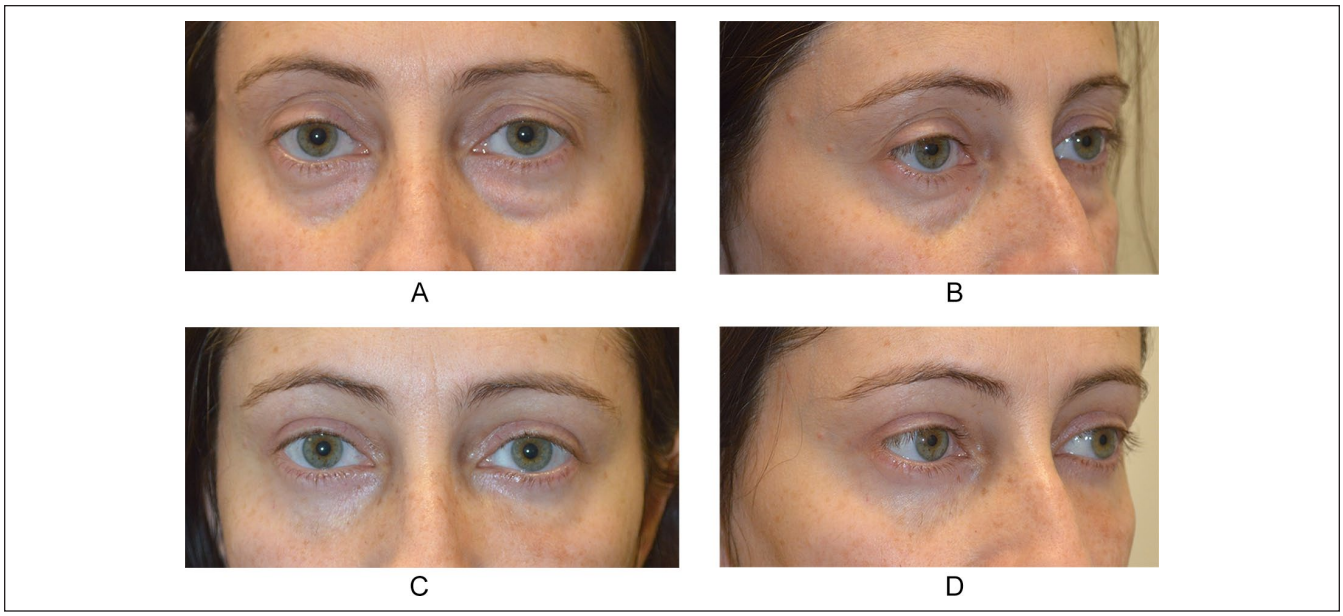

Figure 2. A 43-year-old female, with upper eyelid aging, underwent combined upper blepharoplasty and 0.35 cc upper eyelid hyaluronic acid gel (Belotero Balance) injection each side. Note youthful results. (A-B) Preoperative; (C-D) 3 months postoperative photographs.

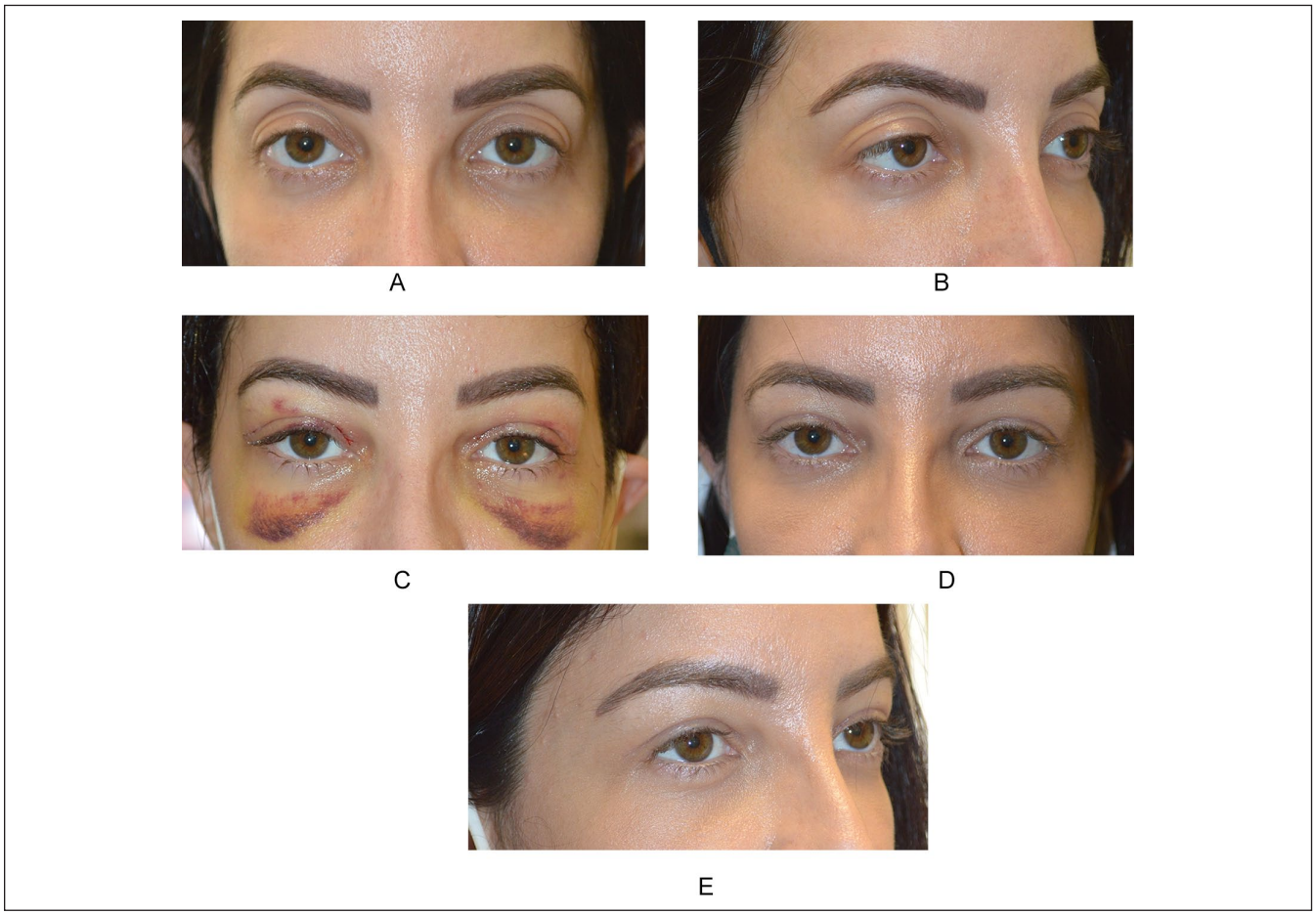

Figure 3. A 34-year-old female, with upper eyelid skin laxity and hollowness, underwent combined upper blepharoplasty and 0.35 cc upper eyelid hyaluronic acid gel (Belotero Balance) injection each side. Note quick recovery and youthful results. (A-B) Preoperative; (C) 1 week postoperative; (D-E) 3 months postoperative photographs.

Figure 4. A 59-year-old female, with upper eyelid aging, underwent combined upper blepharoplasty and 0.25 cc medial upper eyelid hyaluronic acid gel (Belotero Balance) injection each side. Note youthful results. (A) Preoperative. (B) 3 months postoperative photographs.

Figure 5. A 42-year-old half-Asian female, with upper eyelid aging, underwent combined upper blepharoplasty and 0.35 cc upper eyelid hyaluronic acid gel (Belotero Balance) injection each side. Note youthful results. (A) Preoperative. (B) 2 months postoperative photographs.

from upper blepharoplasty. However, the convenience of having both procedures performed concurrently cannot be overstated by the patient.

Conclusions

In conclusion, upper blepharoplasty can safely and effectively be combined with upper eyelid hyaluronic acid gel filler injection to treat upper eyelid aging (skin laxity and fat loss or superior sulcus deformity) for more youthful results.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Mehryar Ray Taban https://orcid.org/0000-0002-6173-0336

References

1. U.S. Food and Drug Administration. *New device approval. Restylane injectable gel*. https://www.fda.gov/medical-devices/aesthetic-cosmetic-devices/fda-approved-dermal-fillers#approved.
2. Goldberg RA, Fiaschetti D. Filling the periorbital hollows with hyaluronic acid gel: initial experience with 244 injections. *Ophthalmic Plast Reconstr Surg*. 2006;22:335-41.
3. Morley AM, Malhotra R. Use of hyaluronic acid filler for tear-trough rejuvenation as an alternative to lower eyelid surgery. *Ophthalmic Plast Reconstr Surg*. 2011;27:69-73.
4. Morley AM, Taban M, Malhotra R, Goldberg RA. Use of hyaluronic acid gel for upper eyelid filling and contouring. *Ophthalmic Plast Reconstr Surg*. 2009;25:440-444.
5. Coleman SR. The technique of periorbital lipoinfiltration. *Oper Tech Plast Reconstr Surg*. 1994;1:120-126.
6. Frileck SP. The lumbrical fat graft: a replacement for lost upper eyelid fat. *Plast Reconstr Surg*. 2002;109:1696-1705.
7. Lee Y, Kwon S, Hwang K. Correction of sunken and/or multiply folded upper eyelid by fascia-fat graft. *Plast Reconstr Surg*. 2001;107:15-19.
8. Lin TM, Lin TY, Chou CK, et al. Introduction the concept of micro-autologous fat transplantation (MAFT) and its application in correction of sunken upper eyelid. *Plast Reconstr Surg Global Open*. 2014;2:e259.
9. Massry GG. Nasal fat preservation in upper eyelid blepharoplasty. *Ophthalmic Plast Reconstr Surg*. 2011;27:352-355.

Author Biography

Mehryar Ray Taban, MD, FACS, Private Practice, Beverly Hills, CA, USA, and Assistant Clinical Professor, Department of Orbital and Plastic Reconstructive Surgery, Jules Stein Eye Institute, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA.