

higher. Surveying eyebrow and eye parameters showed reduced figures for eyebrow-pupil, eyebrow-crease, SOR, and IOR, and an increase for LOR, eye fissure, and upper lid-limbus. Although a statistical difference was reported, the standard deviations and means were within the values for Caucasians. However, clinically, eyes seemed to be more prominent (Table 1).

In contrast, there was minimal scleral show, yet the overall beautiful appearance of the study group was not detrimentally affected (yet it is possible that otherwise they would appear prettier). The sum of these factors led to more prominent eyes in the study group. A review of nasal parameters showed statistical differences, but again, mean values and SD were within those of Caucasians.

Generally, lips were somewhat shorter but more prominent in the study group (vermilion parameters and lip length, sn-st, st-sl). Overall, chin height was a bit shorter, clinically justifiable and regarding sn-st and st-gn values (statistically significant). Facial convexity was greater in the study group (g-sn < sn-pg, perp to FH through sn, inclination of the Lieber line) (statistically significant). The inclination of the Lieber line was 5 ± 1 degrees compared with 1.6 ± 2.5 degrees in Caucasians.

In summary, the overall facies of the study group were as follows: small lower third of the face and chin, prominent eyes, prominent lips, and a more convex facial profile, all denoting a “baby face” appearance. It is obvious that for a reasonable deduction, we are still short of data, but according to the presented information, it seems that although some figures of Caucasians were still applicable to the Persian population, many of them *might* be changed for Persians if optimal operative results are to be achieved (Table 1).

DOI: 10.1097/PRS.0b013e3181cb6486

Mohammad Reza Farahvash, M.D.

Jamshid Khak, M.D.

Department of Plastic Surgery
Medical School of Tehran University of Medical Sciences

Maryam Jafari Horestani, D.D.S.

Aesthetic and Operative Dentistry
Qazvin University of Medical Sciences
Faculty of Dentistry
Qazvin, Iran

Yashar Farahvash

Massachusetts College of Pharmacy
Boston, Mass.

Benyamin Farahvash

Department of Dermatology
Medical School of Boston University
Boston, Mass.

Correspondence to Dr. Farahvash
B-10-1, Hafez Building, Hormozan Avenue, Shahrak Gharb
Tehran 14667, Islamic Republic of Iran
drfarahvash@yahoo.com

PATIENT CONSENT

The patient provided written consent for the use of her image.

REFERENCES

1. Mathes SJ. The head and neck: Part 1. In: *Plastic Surgery*. Vol. 2, 2nd ed. Philadelphia: Saunders Elsevier; 2006:4–5.
2. Farkas LG, Bryson W, Klotz J. Is photogrammetry of the face reliable? *Plast Reconstr Surg*. 1980;66:346–355.
3. Chatrath P, De Cordova J, Nouraei SA, Ahmed J, Saleh HA. Objective assessment of facial asymmetry in rhinoplasty patients. *Arch Facial Plast Surg*. 2007;9:184–187.
4. Choe KS, Sclafani AP, Litner JA, Yu GP, Romo T III. The Korean American woman's face: Anthropometric measurements and quantitative analysis of facial aesthetics. *Arch Facial Plast Surg*. 2004;6:244–252.

Direct Excision of Glabellar Furrows: An Alternative Treatment for Severe Glabellar Rhytides

Sir:

Treatment options for severe glabellar rhytides include brow lifts with open resection of the corrugator muscle, botulinum toxin type A (Botox; Allergan, Inc., Irvine, Calif.) injections, intradermal fillers, topical creams, and endoscopic resection of the corrugator muscle.^{1,2} For a select group of motivated patients with glabellar rhytides that are more severe than the potential postoperative scarring, we believe that the direct excision of severe glabellar furrows is an effective surgical alternative to traditional approaches. It offers the advantage of reduced downtime postoperatively, decreased price, and potential permanency.

This prospective study, conducted over a 4-year period, included 10 patients who met criteria for open or endoscopic treatment of severe glabellar rhytides. Each patient underwent direct excision of glabellar rhytides, with the incision length, method of handling skin and soft tissue, and time of surgery kept as similar as possible between patients. Patients underwent evaluation, along with photodocumentation, at 3 days, 1 week, 3 weeks, and 6 weeks postoperatively. Complications and revision rates were noted. Outcome measures included brow ptosis, incisional erythema, suture marks, suture extrusion, wound infections, hematoma, seroma, unacceptable scarring (hypertrophic scarring and scar unevenness), dehiscence, and numbness. Patient satisfaction was assessed during the 6-month postoperative visit.

In 10 patients, there were no cases of brow ptosis, infections, hematomas, seromas, or wound dehiscences observed. Two patients had suture extrusion, and one had mild hypertrophic scarring, requiring scar resurfacing. There were no cases of brow ptosis. All patients complained of numbness lasting for several weeks to months, and none reported numbness at the 6-month follow-up visit. At the 6-month follow-up visit, all patients reported being very satisfied with their results.

There are significant data to suggest that the endoscopic brow lift with corrugator resection is very effective.^{3,4} However, our experience has been that many surgeons remain cautious during endoscopic and open brow lifts because of the potential risk for damage to the supratrochlear neurovascular bundle. As a result, we have seen patients

require multiple treatments (nonsurgical and surgical) for persistent glabellar frown lines (Fig. 1).

Direct excision is an excellent alternative to other traditional procedures. The surgical effect is usually permanent after the initial treatment, and patients notice the results instantly (Figs. 1 and 2). Direct excision is not performed as frequently as other operations for glabellar furrowing, and for this reason, few data are currently available. Disadvantages of this procedure include minor scarring that is typically unnoticeable in most cases. Numbness can affect initial patient satisfaction in our study; however, all cases of numbness in this series of patients resolved within 6 months after surgery.

Decreased postoperative downtime, decreased price, and potential permanency all are important reasons to consider direct excision as a useful and effective option for the treatment of glabellar furrows. We do not purport that direct excision should be a universal treatment but suggest that direct excision should be considered as

a viable option for suitable patients. In our experience, the results are as effective as other approaches, and scarring is typically minimal, creating favorable results for patients with severe glabellar furrows.

DOI: 10.1097/PRS.0b013e3181cb649e

Neil Tanna, M.D., M.B.A.

Arjun S. Joshi, M.D.

Division of Otolaryngology–Head and Neck Surgery
George Washington University
Washington, D.C.

Darshni Vira, M.D.

Division of Head and Neck Surgery
David Geffen School of Medicine
University of California, Los Angeles
Los Angeles, Calif.

William H. Lindsey, M.D.

Division of Otolaryngology–Head and Neck Surgery
George Washington University
Washington, D.C.

Correspondence to Dr. Tanna

Department of Surgery
George Washington University
2475 Virginia Avenue NW, Apt. 907
Washington, D.C. 20037
ntanna@gwu.edu

DISCLOSURE

The authors have no commercial or financial interests to disclose.

REFERENCES

1. Frampton JE, Easthope SE. Botulinum toxin A (Botox Cosmetic): A review of its use in the treatment of glabellar frown lines. *Am J Clin Dermatol.* 2003;4:709–725.
2. Patel MP, Talmor M, Nolan WB. Botox and collagen for glabellar furrows: Advantages of combination therapy. *Ann Plast Surg.* 2004;52:442–447; discussion 447.
3. Matarasso A, Matarasso SL. Endoscopic surgical correction of glabellar creases. *Dermatol Surg.* 1995;21:695–700.
4. De Cordier BC, de la Torre JI, Al-Hakeem MS, et al. Endoscopic forehead lift: Review of technique, cases, and complications. *Plast Reconstr Surg.* 2002;110:1558–1568; discussion 1569–1570.

A Simplified Lateral Canthopexy Technique

Sir:

Lateral canthopexy has become a routine part of cosmetic lower blepharoplasty to prevent lower lid malposition, especially in those patients with laxity of the lower lid and negative vector anatomy.¹ All canthopexy techniques involve securing the lateral retinaculum to the periosteum of the superolateral orbital rim with a suture. However, the surgical approach to identify the lateral retinaculum varies, with some techniques requiring more surgical expertise than others. Perhaps the most challenging technique is that of Jelks et al.,² who dissect the lateral retinaculum from above through an upper blepharoplasty incision. Dissection of the lateral retinaculum through the lateral extension of a lower blepharoplasty incision is advocated by others.^{3,4} In this article, we describe



Fig. 1. In this preoperative view, the patient has a history of previous direct brow lift by another physician. Note the deep glabellar furrows.



Fig. 2. In a 3-year postoperative image, the longevity of direct excision of glabellar furrows is visible.