

- B-cell lymphoma: A pilot study. *J Am Acad Dermatol.* 2006;54:524–526.
4. Grossman M, Wimberly J, Dwyer P, Flotte T, Anderson RR. PDT for hirsutism (Abstract). *Lasers Surg Med.* 1995;17(Suppl 7):44.
 5. Ortel B, Shea CR, Calzavara-Pinton P. Molecular mechanisms of photodynamic therapy. *Front Biosci.* 2009;14:4157–4172.

Ulthera for Silicone Lip Correction

Sir:

There are two potentially distressing issues with using liquid silicone for facial rejuvenation—not the least of which is its purity. Many practitioners use low-grade silicone instead of U.S. Food and Drug Administration–approved ophthalmologic silicone. Second, and most importantly, as facial structures surrounding the areas of silicone injections undergo their normal process of atrophy, the areas injected with silicone become disproportionately large and unnatural appearing. Because silicone in general is an irreversible procedure, the patient can become permanently distorted. The situation is exacerbated by ongoing aging of adjacent facial structures and an increased gravitational pull on the weight of the silicone/scar mass.

The liquid silicone beads become encased in scar tissue, and this scar is extensively intertwined within the subcutaneous tissues. In the lip, this would be the lip muscle, where the silicone not only makes the lips larger but influences how they move when the patient speaks or smiles. Removing silicone from the lips is difficult at best. Any surgical intervention to remove the silicone also removes muscle tissue and leaves a trail of postoperative scarring in its place. The recovery from this surgery can be painfully long, with profound swelling continuing for months. Some physicians use steroid

injections to soften the scar, but the result is rarely a normal-size or aesthetically shaped, supple lip. Until now, there have been few options for those wanting to reverse the aesthetic damage done with silicone. The good news is that there may be a less obtrusive yet highly effective procedure available.

I recently treated a young woman with silicone lip deformity using Ulthera and was successful in reducing lip volume, including the unnatural anterior projections, without the downtime that is typically associated with surgery (Fig. 1). Ultrasound therapy—the hallmark of Ulthera—heats collagen and creates microthermal “burns.” The presumed mechanism here is a scar remodeling; scar volume, through redistribution of scar collagen, becomes less bulky. Presumably, the lips massage the scar into a more linear and compact configuration. The lips move more naturally as well, with no additional scarring associated with conventional surgery. How long this effect lasts is yet to be determined.

Using a dental block eliminates any discomfort during the procedure. With each treatment, Ulthera ultimately influences the shape of the collagen, resulting in the scar tissue becoming malleable and eventually adopting a more functional shape. Much like a potter with a clay pot, while the clay is still wet, it can take a different shape depending on the potter’s hands. Similarly, Ulthera reverses the “hardening of the clay” formerly present in the lips. As the mouth moves, the effects of Ulthera essentially help reshape the lips. Several sessions are necessary, but lips show an improvement immediately, with more positive changes evident at 2 weeks and beyond. Apart from discovering Ulthera to be a cosmetically viable option, by far the greatest advantage is dodging the postoperative trauma associated with surgical “correction.”

DOI: 10.1097/PRS.0b013e31824effbb

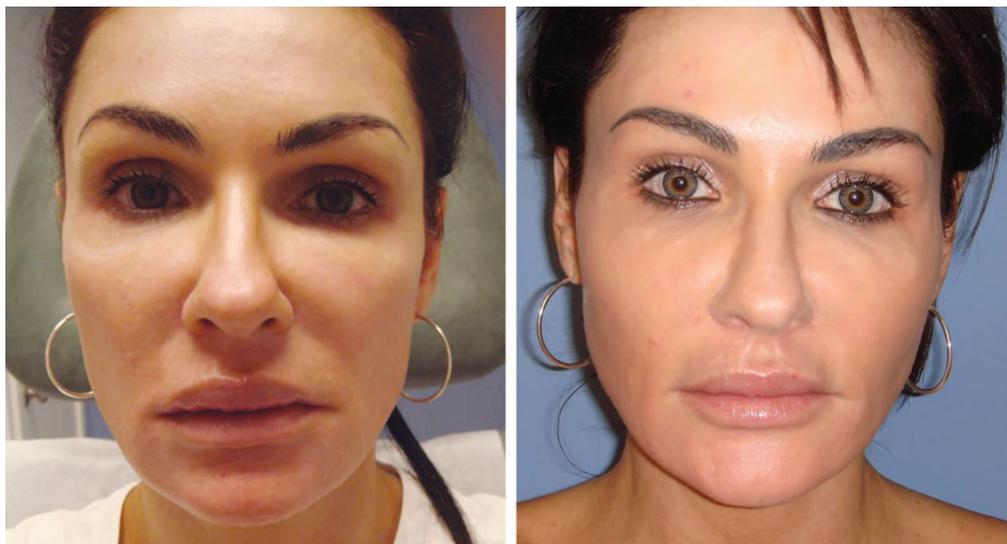


Fig. 1. The patient is shown before (*left*) and 6 months after (*right*) revision of facial fat grafting (by means of regional reduction and addition) and reduction of silicone lip augmentation, both performed by another physician.

Andrew N. Kornstein, M.D.

Museum Mile Surgery Center
1050 Fifth Avenue
New York, N.Y. 10028
info@kornstein.com

DISCLOSURE

The author has no financial interest in any of the products, devices, or drugs mentioned in this article.

PATIENT CONSENT

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

Current Strategies in the Treatment of Gummy Smile Using Botulinum Toxin Type A

Sir:

Gummy smile is a very unaesthetic and common condition defined as the exposure, while an individual is smiling, of more than 3 mm of gingival tissue.¹ This is attributable to several factors, including hyperfunction of the perioral muscles (orbicularis oris, zygomaticus major and minor, depressor septi nasi, levator labii superioris alaeque nasi/anguli oris), lip length, clinical crown length, skeletal problems caused by maxillary excess,² and delayed passive eruption resulting in gingival problems.¹ Many authors have proposed surgical approaches,² but these procedures are associated with morbidity and high cost and are time-consuming.³ Polo^{3,4} recently introduced the use of botulinum toxin type A under electromyographic guidance for the correction of gummy smile caused by hyperfunctional muscles. The author suggested injecting 2.5 U per side at the levator labii superioris, 2.5 U per side at the levator labii superioris/zygomaticus major sites, and 1.25 U per side at the orbicularis oris sites.² The mean gingival exposure reduction was 5.2 mm, and at 24 weeks after treatment, the average gingival display had still not returned to the baseline values.⁴ Hwanga et al.⁵ identified a simple and reliable injection point in the middle of a triangle formed by the vectors of the levator labii superioris, levator labii superioris alaeque nasi, and zygomaticus minor—converging on the area lateral to the ala (Yonsei point) and after they measured the distance of the center of the triangle from the ala and the lip line (the line that connected both commissures). This study identified a safe, reproducible, and effective injection point for botulinum toxin type A.

The above-mentioned studies propose some valid and low-morbidity techniques, even if the results are temporary. Further trials are to be conducted to compare the effect of the treatment in different ethnic, sex, and age groups.

DOI: 10.1097/PRS.0b013e31824f00a6

Alessandro Mangano, D.D.S.

Alberto Mangano, M.D.

Gravedona ed Uniti, Como, Italy

Correspondence to Dr. Alessandro Mangano
Via Mulini 12
Gravedona ed Uniti, Como, Italy 22015
ale.mangano10@gmail.com

DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

REFERENCES

1. Garber DA, Salama MA. The aesthetic smile: Diagnosis and treatment. *Periodontol 2000* 1996;11:18–28.
2. Mazzuco R, Hexsel D. Gummy smile and botulinum toxin: A new approach based on the gingival exposure area. *J Am Acad Dermatol.* 2010;63:1042–1051.
3. Polo M. Botulinum toxin type A in the treatment of excessive gingival display. *Am J Orthod Dentofacial Orthop.* 2005;127:214–218.
4. Polo M. Botulinum toxin type A (Botox) for the neuromuscular correction of excessive gingival display on smiling (gummy smile). *Am J Orthod Dentofacial Orthop.* 2008;133:195–203.
5. Hwanga WS, Hur MS, Hu KS, et al. Surface anatomy of the lip elevator muscles for the treatment of gummy smile using botulinum toxin. *Angle Orthod.* 2009;79:70–77.

Pharyngoplasty Applied to Velopharyngeal Insufficiency: Efficacy versus Morbidity

Sir:

Velopharyngeal insufficiency occurs as a result of the incapability of the soft palate to function properly as a muscular sphincter, mainly in cases of inefficient palatoplasty. In most craniofacial surgical centers, the incidence of residual velopharyngeal insufficiency ranges from 10 to 20 percent.¹ However, despite the good results after surgical treatment, respiratory disorders such as obstructive sleep apnea are common complications.^{2,3} Several studies have shown evidence of sleep respiratory disorder, even if at different rates, and there are few studies that systematically used polysomnography and nasofibrosopic evaluation.^{3,4} It is necessary to establish the correlation between the advantages of pharyngoplasty for cleft lip and palate treatment and sleep respiratory disorder and its clinical repercussions.

A retrospective, transversal study including 70 patients submitted to pharyngoplasty between the years 2000 and 2010 was conducted. Thirty-nine patients were able to be tracked after pharyngoplasty, with superior pharyngeal flap, based on three criteria: nasofibroscopy, polysomnography, and a speech therapist's evaluation. Seventy percent were female patients and were operated on at an average age of 19.9 years. The thickness, position, and proportion of the pharyngeal flap was analyzed by means of nasofibroscopy, with results being considered adequate or inadequate. Occlusion formed by the flap during speech was also examined and classified as partial, complete, or nonexistent (Fig. 1). Polysomnography was used to evaluate the apnea and hypopnea index. The speech therapist conducted the evaluation, and the follow-up of the patients was based on hypernasality, changes related to speech understanding, and