Cheek Augmentation With Dermicol-P35 27G

Neil S. Sadick, MD; and Laura Palmisano, RPA-C

Full and high cheekbones are considered a desirable component of facial attractiveness. A new, highly purified, porcine-based collagen filler Dermicol-P35 #27G (Evolve; Ortho Dermatologics, Skillman, NJ) is now available that does not require pretreatment sensitivity testing and has shown a 12-month persistence of results in clinical trials. This article discusses the clinical experience of patients who received cheek augmentation with Dermicol-P35. (Aesthetic Surg J 2009;29:55–58.)

Full and high cheekbones are considered desirable for facial attractiveness and are associated with youth. During the aging process, the soft tissues of the face can suffer a loss of volume when subcutaneous fat redistributes or diminishes. Factors that can contribute to facial aging include diminished tissue elasticity, gravity, stress, and sun exposure. Cheek (malar) augmentation is a very popular procedure that can replace lost facial volume, enhance cheek prominence, improve facial symmetry, and restore a youthful appearance.

Surgical procedures to enhance the cheek area include permanent implantation of materials such as silicone. However, there are several disadvantages to permanent implants, including the invasiveness of the procedure, infection, the potential displacement of implants, and the loss of sensation to the area. Therefore, for many patients who are seeking an effective procedure to enhance their malar region but who also want to avoid the potential problems of surgery, a minimally invasive, nonsurgical procedure is preferable. Nonsurgical options for soft tissue contouring include autologous fat injections (which require a separate preliminary harvesting procedure) and injectable dermal fillers.

Dermal fillers in particular have become increasingly popular among both patients and clinicians because they can be used to restore volume and rejuvenate facial appearance with minimal discomfort to the patient. The ideal dermal filler should be safe and nonpermanent, but last 1 to 2 years, have low immunogenicity and low incidence of adverse events, be easy to inject, and cause minimal pain upon injection. Currently, there exist many dermal filler options, which can differ in material origin (biologic or synthetic) and longevity in the body (biodegradable or permanent). Biodegradable fillers include hyaluronic acid-based and collagen-based fillers, both of which range in longevity from 3 months to 1 year, and calcium hydroxylapatite (Radiesse/Radiance FN; BioForm Medical, San Mateo, CA) and poly-L-lactic acid (Sculptra; Dermik Laboratories, Bridgewater, NJ), both of which can last up to 2 years. Permanent fillers (including polymethylmethacrylate and silicone) can be difficult to remove and may be associated with a higher incidence of late complications, such as inflammatory nodules, vascular occlusion, and granulomas. Therefore, biodegradable fillers may be a better option for some patients, such as those receiving treatment for the first time.

Injectable bovine collagen-derived dermal fillers (Zyderm and Zyplast; Allergan, Santa Barbara, CA) have been available for use in the correction of facial contour defects since the 1980s. However, this material has been associated with sensitivity in some patients and therefore requires a skin test 4 weeks before treatment. In addition, this material generally provides shorter-term results (3-5 months) compared with newer dermal fillers and it uses glutaraldehyde as a crosslinking molecule. Human collagen-based dermal fillers (Cosmoderm and Cosmoplast; Inamed) are also available. These fillers do not require a skin test, but results from these products are also shorter-term (3-5 months).

Hyaluronic acid-based dermal fillers (including Restylane and Perlane [Medicis Aesthetics, Scottsdale, AZ] and Juvéderm [Allergan, Santa Barbara, CA]) do not require a pretreatment skin test and provide longer-lasting results compared with bovine collagen-based dermal fillers. In one clinical study, smooth gel hyaluronic acid dermal filler (Juvéderm) showed an improved persistence of results (>6 months) compared with a bovine collagen-based dermal filler. For Restylane SubQ, beneficial results were reported to persist up to 64 weeks in patients who received cheek augmentation. However, a 2007 study by Alijotas-Reig et al reported that hyaluronic acid-based fillers may be associated with chronic inflammatory and granulomatous adverse reactions.

Dr. Sadick is in private practice in New York, NY.
Recently, a new, highly purified, crosslinked, porcine collagen-derived dermal filler Dermicol-P35 27G (Evolence [Ortho Dermatologics, Skillman, NJ]) has become available. This filler is produced using Glymatrix technology, a novel method of crosslinking collagen molecules using a natural sugar, D-ribose. Dermicol-P35 27G has proven efficacious for the treatment of nasolabial folds, with results persisting for at least 12 months. Low immunogenicity was also reported; therefore, a skin test is not required before the procedure. Here we discuss our clinical experience with Dermicol-P35 27G in patients who received cheek augmentation.

MATERIALS AND METHODS

Dermicol-P35 27G is suitable for patients desiring mild to moderate cheek correction and is supplied in a sterile, prefilled, 1-mL syringe with a 27-gauge needle (with either an 0.5- or 1-inch needle). For some patients, injection with a 30-gauge needle is preferable. Patients who are prone to bruising are instructed to avoid aspirin and nonsteroidal antiinflammatory drugs for 1 week prior to treatment.

Before treatment, our patients were photographed and patient consent was collected. To increase patient comfort during injection, either a topical anesthetic (such as lidocaine) was applied to the injection site 30 minutes before injection or 0.2 mL of lidocaine was mixed into the syringe. Injection sites were marked and the treatment area was cleaned with a topical antiseptic. The needle was inserted in 3 locations where the tear trough meets the zygomatic arch. The sites of injection for cheek augmentation are shown in Figure 1. The filler was injected in a retrograde fashion transdermally into the mid-to-deep dermal layer (Figure 2) to provide structural support. Injection techniques comprised a combination of linear threading and vertical and horizontal crosshatching. Once the treatment was complete, the cheek areas were slightly massaged and ice was applied if necessary. Patients were instructed to apply ice if swelling occurred and not to manipulate the area for several hours. Patients were evaluated immediately after injection and 1 week posttreatment.

RESULTS

The typical volumes of Dermicol-P35 27G administered for cheek augmentation are 1 mL (1 full syringe) per cheek, but some patients may require more. The results are immediately visible to patients after injection. The majority of patients experience little or no recovery time and are able to resume their normal activities immediately after the procedure. For the majority of patients, full correction is achieved in 1 visit.

In our clinical practice, patients have reported that the Dermicol-P35 27G injection may be more painful than other fillers. However, generally, minimal or no swelling or bruising is observed postinjection and at the first follow-up visit. Patient satisfaction has been very high and patients return for further treatments every 3 to 6 months to maintain their results. Unlike results seen with some hyaluronic acid fillers, which can swell, we have not encountered any cases of overcorrection with Dermicol-P35 27G.

Case Report

A 37-year-old woman presented with mild volume loss and desired a fuller, more youthful appearance to her face (Figure 3, A, C). One milliliter of filler was injected into each cheek. She also elected to have filler injected into her chin. No swelling, bruising, or lumps were observed 1 hour posttreatment (Figure 3, B, D). After treatment, her cheeks appeared fuller and more prominent and her overall appearance was more youthful.

DISCUSSION

Sagging skin and the loss of facial fullness are common consequences of the aging process. Biodegradable dermal fillers provide a practical, convenient, and effective alternative to surgical cheek augmentation. To reduce the signs of facial aging, dermal fillers can replace subdermal malar fat, restore facial volume, and smooth the appearance of facial skin.

Dermicol-P35 27G is a new, porcine collagen-derived biodegradable dermal filler that has shown high patient satisfaction and superior durability compared with bovine collagen filler in clinical trials. In addition, lower incidences of bruising and swelling have been reported with porcine collagen dermal filler injection compared with hyaluronic acid-based fillers.
Cheek Augmentation With Dermicol-P35 27G

Our clinical experience with Dermicol-P35 27G for the purpose of cheek augmentation has been highly favorable. We have found that Dermicol-P35 27G demonstrates good tolerability, reproducible effects, and less bruising and swelling than other dermal fillers. Over the past year, our clinical results have been consistent with the results previously reported for Dermicol-P35 27G and our patients have consistently reported high satisfaction with their aesthetic outcomes. Because of their satisfaction with Dermicol-P35 27G, some patients have requested additional treatment after 3 to 6 months to further augment or enhance the prominence of their cheek region. Patients desiring maintenance treatment generally return after 6 or more months.

CONCLUSION

Dermicol-P35 27G is a newly available porcine collagen-based dermal filler for use in facial contour augmentation. We have found that patients who have undergone cheek augmentation with Dermicol-P35 27G report minimal recovery time, a low incidence of adverse events, little to no swelling or bruising immediately postinjection, and high satisfaction with their results. Therefore, Dermicol-P35 27G is a convenient and tolerable option for patients seeking to restore facial volume and improve facial contours with a temporary dermal filler.

ACKNOWLEDGMENT

The authors would like to acknowledge the assistance of Rebecca Jarvis, PhD, of Envision Pharma (Southport, CT) in the preparation of this manuscript.

DISCLOSURES

The author is a faculty member of the Evolence STAR Program and Colbar LifeSciences.
REFERENCES


Accepted for publication March 6, 2009.
Reprint requests: Neil S. Sadick, MD, FAAD, FACS, Sadick Dermatology, New York, NY 10075. E-mail: nssderm@sadickdermatology.com.
Copyright © 2009 by The American Society for Aesthetic Plastic Surgery, Inc.
1090-820X/$36.00
doi:10.1016/j.asj.2009.03.004