

## Dermal Fillers for Aesthetic Rejuvenation



Procedures for aesthetic rejuvenation are increasingly popular among cosmetic patients. Dermal fillers can be used to treat wrinkles, correct defects, and add volume to the aging face. Here, tips for using a range of filler materials are discussed along with complications that dermatologists should consider when using dermal fillers.

Gary Goldenberg, MD

### **What does your patient need to know at the first consultation?**

Several things are important. First, I have a discussion with the patient to find out exactly what bothers him or her the most. Some patients have very specific areas they would like to address while others simply come in and say, “Please make me look better/less tired/younger.” It’s very important to review all of the treatment options with the patient. Not only are there many different types of fillers, but there also are differences among the products within each category; for example, some hyaluronic acid (HA) fillers have similar clinical properties and applications (eg, Juvéderm Voluma XC [Allergan, Inc], Restylane Lyft [Galderma Laboratories, LP]), but they differ from other similar HA fillers (eg, Juvéderm Ultra XC [Allergan, Inc], Restylane [Galderma Laboratories, LP], Belotero Balance [Merz North America, Inc]) with regard to G’, molecular weight, and crosslinking. I also discuss longer-lasting filler materials such as calcium

hydroxylapatite (eg, Radiesse [Merz North America, Inc]) and injectable poly-L-lactic acid (Sculptra Aesthetic [Galderma Laboratories, LP]), which stimulates collagen production.

For patients that have never had filler treatments before, I may try to steer them in the direction of using an HA filler simply because the effects can be reversed if they aren’t happy with the results. It’s also important to discuss how much filler the patient will need to achieve the desired effect. It’s important to take the patient’s budget into account when formulating a treatment plan. I also tell my patients that fillers alone may not achieve the desired results and that they also may need toxin treatment (eg, onabotulinumtoxinA [Botox Cosmetic (Allergan, Inc)], incobotulinumtoxinA [Xeomin (Merz North America, Inc)], abobotulinumtoxinA [Dysport (Galderma Laboratories, LP)]), and possibly laser treatment to improve the overall skin appearance. Additionally, I always discuss a skin care routine and the need for daily sunscreen use.

### **What procedures are most commonly requested in your practice?**

In my practice, patients present with several common complaints. Thin, downturned lips are a common treatment area, and many patients are concerned about jowls and flattened cheeks. Patients also often seek treatment for prominent nasolabial and melolabial folds and “smoker’s lines.” I typically discuss contouring and shaping more than simply filling lines. We try to take a holistic approach to improve the overall appearance of the face as opposed to just focusing on certain lines and wrinkles.

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### What are your go-to injection techniques?

All fillers have a place in my practice. I use Juvéderm Ultra XC, Restylane, and Belotero Balance to improve the appearance of tear troughs. Juvéderm Ultra Plus XC and Restylane are really great for deep creases like nasolabial folds. Belotero Balance and Restylane Silk are especially good for treating perioral wrinkles and lines. I use Juvéderm Voluma XC, Restylane Lyft, and Radiesse more for shaping and contouring, but these products also work great for adding volume. I use Sculptra Aesthetic as a foundation for patients who need volume and collagen stimulation. Radiesse is a great option for hand rejuvenation and was recently approved for this treatment by the US Food and Drug Administration.

There are numerous injection techniques that I find useful, including depot, serial puncture, fanning, and tower techniques. I recommend learning all of these and then picking what works for you. As an overall principle, I try to minimize tissue trauma and the possibility of bruising. Most importantly, one has to know the anatomic location of the injection site and stay away from danger zones. It's also very important to always draw back to ensure that one isn't injecting into a vessel.

I think it's smart to start with HA fillers since the effects are reversible. After the physician becomes

more comfortable with performing filler procedures, I would recommend moving on to longer-lasting fillers.

### What complications/side effects should physicians be aware of?

The most common complications associated with dermal fillers are bruising and swelling. The risks for these side effects can be decreased by icing the treatment area immediately before and after the procedure. Also, I often recommend products containing arnica (topical and/or oral) for patients who tend to bruise. Nodule formation, skin necrosis, infection, and vascular occlusion in the immediate or distal areas can be avoided with proper training and knowledge of local anatomy; for example, it's important to always draw back before injecting to ensure you aren't injecting into a vascular structure. Knowledge of local anatomy and its variations also is important in order to avoid these danger zones. In very rare cases, blindness and stroke may occur following treatment with dermal fillers.

### SUGGESTED READINGS

- Sadick N, ed. *Augmentation Fillers*. New York, NY: Cambridge University Press; 2010.
- Small R, Hoang D. *A Practical Guide to Dermal Filler Procedures*. Philadelphia, PA: Lippincott Williams & Wilkins; 2011.