

## DETAILS

By Garry R. Lee, MD

# The Anti-Bruising Cannula Revolution

Blunt-tipped cannulas are emerging as the tool of choice for several dermal filler indications.

Cosmetic injectable fillers have evolved from the early use of bovine collagen to the widely popular hyaluronic acid fillers of today, such as Juvéderm (Allergan, juvederm.com) and Restylane (Medicis, restylaneusa.com). Additional fillers now on the market include Sculptra (Sanofi Aventis, sculptraaesthetic.com) and Radiesse (Merz Aesthetic, radiesse.com) in the eternal quest for longer lasting products.

The majority of practitioners use standard needles to inject cosmetic fillers. However, repeatedly injecting patients with larger gauge needles in any pattern causes vascular trauma and, consequently, postprocedure bruising and swelling. This results in patients carefully timing

a tiny slit on the side of the cannula's blunt end, which minimizes the shearing effect of traditional needles.

Unfortunately, there is a paucity of research to substantiate the degree of bruising and swelling reduction—to date. Anecdotal reports are claiming a 70% to 100% reduction in bruising and swelling, and the anecdotal images are mesmerizing to both physicians and patients. The evolution of the needle to the micro-cannula is so significant that three manufacturers—DermaSculpt (dermasculpt.net), Air-Tite (air-tite.com), and Magic Needle (magic-needle.com)—have leaped into the marketplace to fill the gap (pun intended).

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cosmetic filler treatments prior to momentous events or even delaying appointments to avoid unsightly ecchymoses. Now, injection tools are advancing along with the fillers themselves to offer better outcomes. For example, the use of blunt-tipped cannulas allows practitioners to reduce vascular trauma and bruising without sacrificing results.

The concept is brilliantly simple: physicians use a pilot needle to pierce the skin. The needle is left in the skin for one minute to allow for coagulation. Then it is removed and replaced with a hollow-tube, blunt-tip cannula to inject the filler material. The fillers are extruded from

### First-Hand Observations

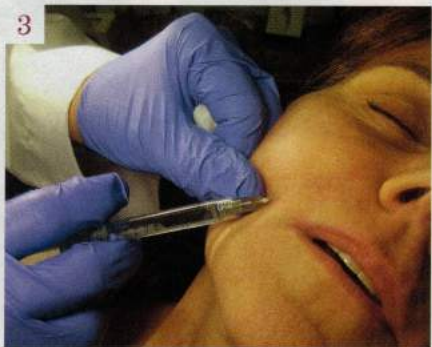
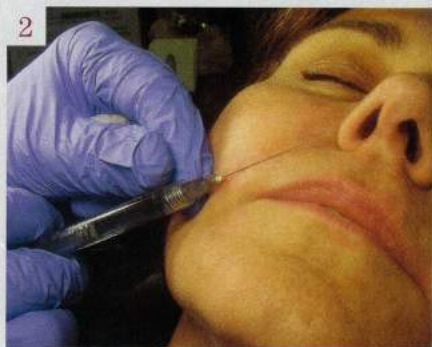
The hands-on experience is also convincing. Having done thousands of cosmetic injectable filler treatments over the years, being in the Top 10 in the State of Nevada, and having taught physicians and nurses how to inject for years—I am impressed. My personal preference for most general cosmetic filler facial applications is to use Juvéderm Ultra Plus XC with the 1½-inch 27-gauge Air-Tite cannula. I use a standard larger needle to make a pilot-hole, remove the needle and replace it with the Air-Tite cannula, which is placed on the Juvéderm 1.0cc syringe. The trick is to get the micro-cannula smoothly into the dermis and to fan it evenly into the desired areas.

Traditionally, cosmetic injectable fillers are injected in one of four patterns: serial puncture, linear-threading, fan and cross-hatching. I've taught a combination of the last two patterns for the past three years to beginning cosmetic physicians and nurse injectors using a longer 1¼-inch needle instead of the standard ½-inch needle included. Longer needles minimize the need for more punctures and



► This patient is shown immediately following lip enhancement using an HA filler and blunt tip cannula.





➤ Garry Lee, MD, uses a blunt-tip cannula to fill the nasolabial folds. His technique—dubbed the Long Cannula Double-Crossed Fan or LeeXX—requires only two pilot holes for injection. The combination of cross-hatching and fanning offers smooth results.

minimize pain, bruising and swelling. For example, in the nasolabial or marionette areas, I inject from the base of the wrinkle with the longer needle in a fan, upwards. Then, I move laterally to the side of the wrinkle and fan at right angles to crosshatch the initial fan for a smoother lattice-like pattern for better results with less pain, bruising and swelling (see images, left). This technique works particularly well with the micro-cannula. The cosmetic filler representative who saw me teaching it coined it the “LeeXX.” I refer to it as the Long Cannula Double-Crossed Fan.

**Top Indications for Cannula vs. Needle**

One area the micro-cannula is clearly superior for cosmetic filler enhancements is in the lips, which are highly vascular and, hence, intrinsically prone to swelling. With two tiny pilot holes, the entire upper lip can be beautifully sculpted in just minutes with minimal trauma, swelling and bruising.

The micro-cannula, however, is *not* the best choice in all cosmetic injectable applications and locations. For example, if a patient needs only two or three injections, it is more efficacious to needle-inject instead of fumbling with a cannula. This is what I do for most scars I inject. I also recommend against using the micro-cannula for cosmetic fillers in areas where the tissue is too fibrous for inserting the blunt cannula tip, such as the Occipital-Frontalis (forehead) area when the traditional use of Botox Cosmetic would create too much brow drooping, or ptosis.

In summary, the micro-cannula revolution has begun, and we are only beginning to write the book on what we can—and cannot—do with this new injection tool. ❏

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Photo courtesy of Gary Lee, MD