Volume Restoration v. Lifting

After several years of injecting HA fillers, we are conditioned to think of facial volume restoration and facial lifting as synonymous needs—and indeed this is generally the case. The requirement for filling without lifting is unusual and confined to a subset of patients—for instance, some patients of color who develop age-related focal volume loss from areas such as the midface without appreciable descent of the malar eminence. The injection of Evolence alone thus represents something of a compromise for most patients, whereby less facial lifting is achieved in the interests of minimizing tissue bruising after injection (since Evolence has a somewhat hemostatic effect) and tissue swelling (because Evolence is non-hydrophilic). Patients may also compromise by forgoing re-volumization of certain facial areas, such as the lips and the lower eyelids, where Evolence implantation is not recommended.

A more versatile strategy is to combine Evolence with HA fillers, in order to achieve simultaneous facial sculpting and lifting with minimal recovery time. The two types of filler can be placed in different facial zones: Evolence can be injected into the mid to deep dermis of nasolabial rhytides and accessory lines, marionette lines, and the labiomial crease, while large particle HA (Perlane, Medicis) is injected into the deep dermis and subcutis of the oral commissures, prejowls, lips, and midface. (An alternative approach is to inject calcium hydroxylap-
atite [Radiesse, Bioform], another lifting filler that can also be injected into the deep dermis and subcutis, in place of the large particle HA. When collagen and HA fillers are differentially placed in this manner, they produce little or no bruising and swelling. Small particle HA filler (Restylane) can be injected with slow, controlled technique into the vermillion borders, where the slight temporary swelling it may produce is perceived by patients as an advantage, since it enhances the white roll of the lips. Injection of the lower eyelids, which have a propensity to bruise, with small particle HA filler may be deferred to a later treatment session.

The addition of a fast-acting neurotoxin, abobotulinumtoxin A (Dysport, Medicis), usually allows full facial rejuvenation to be achieved within two to four days. This combination injection strategy provides excellent aesthetic improvement and longevity of results. There is also the potential for synergistic neocollagenesis, since both crosslinked collagen (Evolence) and particulate HA (Restylane) have been shown to stimulate physiologically meaningful de novo collagen synthesis via the laying down of cellular arrays of collagen fibrils.

Another novel combination strategy that minimizes or eliminates recovery time is to layer Evolence with a non-lifting HA filler containing 0.3% lidocaine (Prevelle Silk, Mentor/Johnson & Johnson) in the perioral region and midface. Prevelle Silk is a softer, less concentrated filler than hydrophilic, lifting HA fillers such as Restylane, Perlane and Juvéderm. It can be injected into the superficial to mid dermis without the risk of bluish discoloration due to the Tyndall effect, and it fills fine lines effectively. Because it is non-hydrophilic, it does not provide significant lift and it does not cause tissue swelling after injection. The non-hydrophilic HA filler with lidocaine (Prevelle Silk) is injected first into the superficial and mid der-
mis of the nasolabial folds, the marionette lines and oral commissures, the prejowls and the midface. Crosslinked collagen (Evolence) is then injected beneath the HA filler into the mid to deep dermis in these facial areas. This layered placement provides both full correction of both fine and deeper rhytides and also excellent anesthesia and patient comfort during the Evolence injection due to the prior injection of HA with lidocaine. There is decreased ecchymosis due to the hemostatic effect of Evolence and no tissue edema because both the collagen and HA fillers employed are non-hydrophilic. There is also the intriguing possibility that placement of Evolence beneath Prevelle Silk may increase the longevity of the latter, which is about half that of Restylane or Juvederm when it is implanted alone.

Additionally, Prevelle Silk can be injected alone into the lower eyelids and the lips. One benefit for patients of this layering paradigm is that it offers them full face re-volumization at a relatively low cost—albeit that the results may not be as long-lasting as when a more concentrated HA filler such as Restylane or Juvederm is selected. One of the two currently FDA-approved neurotoxins, abobotulinumtoxin A (Dysport) or onabotulinumtoxin A (Botox Cosmetic, Allergan) can be added to complete the integrative full face rejuvenation protocol.

Techniques Worth Learning
The optimal technique for injection of long lasting crosslinked collagen fillers is counterintuitive in a number of respects to those who are accustomed to injecting HA fillers. The short learning curve required to master a different filler injection technique is worthwhile, as the combination of collagen and HA fillers with today’s neurotoxins enables the creative injector to devise individualized treatment paradigms to meet patient objectives, even at short notice. The possibilities, and the impetus to learn these new techniques and combination strategies, will expand further with the imminent introduction of another long-lasting collagen filler (Evolence Breeze, Ortho Dermatologics/Johnson & Johnson) that is suitable for injection into fine lines, lips and the lower eyelids and is currently awaiting FDA approval.

A number of upcoming educational initiatives* can help us to define a new generation of patients who are good candidates for combination treatment with collagen and HA fillers. One is a Continuing Medical Education satellite symposium at the annual meeting of the American Academy of Dermatologic Surgery (ASDS) this October, entitled “Advanced Concepts in Facial Rejuvenation: Beyond The Nasolabial Fold,” that features live demonstrations of new paradigms for integrative full face rejuvenation. This multidisciplinary symposium includes practical strategies for success when selecting and combining HA and collagen fillers with the two currently available botulinum neurotoxins, and advanced injection techniques to maximize aesthetic improvement, longevity of results and patient comfort while minimizing or eliminating recovery time. Specific strategies for evaluating and treating skin of color are also discussed.

Another symposium of note, “Aesthetic Plastic Surgery: The Next Generation,” which takes place in New York City this December, provides a comprehensive and interactive overview of new trends and techniques in injectables and a variety of other aesthetic procedures. 

Dr. Sundaram’s Practical Primer for Dysport will return this fall.

*The satellite CME symposium, “Advanced Concepts in Facial Rejuvenation: Beyond The Nasolabial Fold”, is jointly sponsored by USF Health and i.e.aesthetics with unrestricted educational funding from Mentor Corporation. Thursday, October 1, 2009 7.30 to 9.30pm, ASDS 2009 annual meeting in Phoenix, AZ. www.asds.net

Dr. Sundaram has performed media work for Allergan, Inc., serves as a Consultant and Speaker for ColBar Life Science Ltd./Ortho Dermatologics, and serves as a Clinical Investigator, Consultant and Speaker/Trainer for Medicis Pharmaceutical Corp. She has no stocks, shares, or other financial interests in these or in any other pharmaceutical or device companies.