



THE ELIXIR OF YOUTH

*Product versatility, practitioner skill
drive the market for injectables*

BY **JAN BOWERS**, CONTRIBUTING WRITER

Injectable fillers and neurotoxins are hitting the sweet spot on the supply-demand curve: an array of products, both new and enhanced, are proving effective for a growing number of indications, and are now eagerly sought by patients beyond the traditional demographic of middle-aged women. "It's a whole different ballgame," said Seth L. Matarasso, MD, clinical professor of dermatology at the University of California School of Medicine in San Francisco. "We have a different population, we have new products, we have new indications. It's a very, very exciting time."

Statistics compiled by the American Society for Dermatologic Surgery (ASDS) for its annual Survey on Dermatologic Procedures show a 16.7 percent increase in the number of neuromodulation procedures performed by its members from 2012 to 2014 (1.49 million and 1.74 million, respectively). In its 2014 Plastic Surgery Statistics Report, the American Society of Plastic Surgeons reported a 4 percent decrease in rhytidectomy (facelift) procedures from 2013 to 2014 (to 128,266), accompanied by a 6 percent increase in neurotoxin injections (to 6.7 million) and an 8 percent increase in hyaluronic acid filler injections (to 1.8 million). "There's a time and a place for a facelift, or to get your upper and lower eyelids done," Dr. Matarasso said. "But people are trying desperately to put off going under the knife. With a little bit of neurotoxin and a little bit of filler, you can lift the eyelid a few millimeters and have a nice shelf to put your eye makeup on. We can give patients options that they didn't have before." >>



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Matching the product to the problem

The versatility of hyaluronic acid translates to a broad range of applications, from soft, pliable fillers for treating fine lines and plumping lips to the more viscous products used to lift and volumize the cheeks. “We’re aiming for a complete, three-dimensional result that looks natural, that’s replacing the changes of aging. Now, because we have so many different fillers to choose from, we’re able to individualize the treatment and cherry-pick what is the best filler for each area,” said Kimberly J. Butterwick, MD, a private practitioner in San Diego.

The leading hyaluronic acid fillers include Galderma’s Restylane family of products, Allergan’s Juvederm group, and Merz’s Belotero Balance. Other dermal fillers approved by the U.S. Food and Drug Administration include Sculptra Aesthetic, injectable poly-L-lactic acid (Galderma); Radiesse, synthetic calcium hydroxylapatite microspheres (Merz); and Bellafill (formerly known as Artefill), injectable bovine collagen dermal filler with non-resorbable polymethylmethacrylate microspheres (Suneva Medical).

“We have more and better fillers than we had just a few years ago — better volume fillers and better fine line fillers,” said Jeffrey S. Dover, MD, associate professor of clinical dermatology at Yale University School of Medicine and associate professor of dermatology at Brown Medical School. “One of the new products, Belotero, is a soft, malleable filler that can be injected into tiny, tiny lines without getting a bump, a crease, or the Tyndall effect. We didn’t have that before.” Mary Lupo, MD, clinical professor of dermatology at Tulane School of Medicine, maintained that “no other product quite gives the nice, natural lift to the cheek area that Voluma [FDA-approved in 2013] will give you. Another excellent product that’s been recently added is Restylane Silk, which gives a more natural smoothing and correction of the lips without over-volumization. It’s the least viscous, about 18 mg per ml concentration of hyaluronic acid.” Slick new products notwithstanding, Dr. Lupo insisted that “the most important variable is not the product but the skill and judgment of the person who’s going to select and inject that product.”

Among neurotoxins, Allergan’s Botox continues to dominate the market, followed by Galderma’s Dysport and Merz’s Xeomin (all are botulinum toxin type A). Dr. Lupo pointed to patients’ “comfort and familiarity” with Botox as a key factor driving its use, adding that “patients aren’t always picky about which filler you use, but they are often picky about the toxin. I use all three, but I use much more Botox than I do Dysport or Xeomin.” Dr. Butterwick noted that “within the next year or two, we’ll see a few more toxins coming to the market. We don’t know the benefits yet, but there may be longer duration, perhaps up to six months.” A topical form of botulinum toxin type A, now under development by Revance Therapeutics, is expected to be available soon, Dr. Butterwick said. “There are many people who don’t get treatment because of needle-phobia, so I think it will bring a whole new group of patients in when it’s approved. Plus, it will be wonderful for patients with hyperhidrosis, because they will be able to avoid painful injections in the hands and under the arms.”

Winning combinations

Equipped with a growing arsenal of anti-aging weapons, aesthetic dermatologists are drawing on more than a decade of experience with toxins and fillers to help patients achieve a more youthful appearance that seems relaxed and natural. “It’s all about combination therapy,” Dr. Matarasso said. “We’re not looking at each anatomic area anymore; it’s pan-facial rejuvenation — a little toxin here, a little filler there. We’re getting more creative with our toxins, doing more global upper face softening rather than just the glabella and crow’s feet. As we hone our skills, we can create paresis rather than paralysis — a softening of the lines from muscle movement.” Dr. Lupo said that among her patients, “we have found a dramatic increase in the proportion of Botox patients who also do fillers. Botox remains, in isolation, more popular than fillers in isolation, but now the combination is more popular than either alone.”

Using toxin and filler together is particularly effective in attacking frown lines, but for some patients the best approach is to separate the treatments by a couple of weeks, said Bruce Katz, MD, clinical professor of dermatology

at The Mount Sinai School of Medicine, director of the Cosmetic Surgery & Laser Clinic at Mount Sinai Medical Center, and director of the Juva Skin & Laser Center in New York. “For someone with deep, etched-in frown lines who hasn’t had Botox treatment, we say let’s try Botox and wait two or three weeks, so it’s working fully. Then use the filler. Also, in patients with deep forehead lines or lines around the eyes, we’ll often treat them with a toxin first, then follow up with a fractional laser if the lines don’t go away.”

A combination might very likely involve a number of different fillers in one face. “The fun and art of fillers is choosing which product to use where, and in which patient,” Dr. Butterwick said. “So we’ll volumize with Voluma, Radiesse, Restylane Lift, or Sculptra. If the patient also needs some volumizing in the lips, we’ll combine a lighter weight, softer product such as Juvederm, Restylane Silk or maybe just plain Restylane. Then, to fill in some of the deep smoker’s lines without making the upper lip bulky, you may choose Belotero or Restylane Silk.” The volumizing fillers tend to last longer than the products used to fill fine lines, Dr. Butterwick said, “because they’re placed deeper and we use more of them. And Voluma is highly crosslinked, so it’s harder for the body to break down. They show a two-year duration on their label, and our study did bear that out.”

Beyond crow’s feet

Although the early signs of aging — glabellar lines, crow’s feet, nasolabial folds, and marionette lines — are the mainstay targets, dermatologists are taking aim at other areas of the face and body to promote an overall youthful appearance. “Women are used to getting their faces rejuvenized, and now they’re noticing that the neck, chest and hands might not match,” Dr. Butterwick said. “It’s more natural-looking if we treat these other areas. Plus, they don’t need as much treatment, and we don’t need to do it very often.”

To treat sagging earlobes, Dr. Butterwick injects Restylane or Juvederm. Dr. Katz

Young and old



The demographic profile of the patient seeking anti-aging treatment “has remarkably changed” in his experience, said Seth Matarasso, MD. “I don’t know if this is a San Francisco phenomenon, but I’m seeing a younger cohort of people coming in. The younger generation is a bit more sophisticated about educating themselves via the Internet, and they know what’s available and where to go.” Not that they necessarily know what treatment is advisable. “They’re asking for everything under the sun, and often you really have to spend some time to educate them and say listen, you’re too young for this. Save your money,” Dr. Matarasso said. He does inject young adults, “but would I give a 21-year-old Botox for cosmetic purposes? No; they don’t need it.”

When is it too early to start cosmetic procedures? Kenneth A. Arndt, MD, a colleague of Jeffrey S. Dover, MD, who is a clinical professor of dermatology, emeritus, at Harvard Medical School, poses the question in the “Viewpoint” section of *JAMA Dermatology* (2013;149[11]:1271). Dr. Arndt points out that treating facial muscles with neurotoxin in an individual’s 20s or 30s will prevent expression lines from forming, and that both hyaluronic acid fillers and calcium hydroxylapatite have been shown to stimulate collagen production. He called this “prejuvenation,” to imply that early treatment would avoid later quests for “rejuvenation.” “So there really is rarely a time that is too early,” he concludes. “Perhaps the better question is, ‘When is it too late?’”

Dr. Dover said he uses this approach in patients in their late 20s and early 30s whose goal is to age gracefully. “They don’t have visible lines yet, but we can see exactly where they’re going to get them,” he explained. “Every patient is a little different, and we customize the neurotoxin injection site depending on their movement. We’ll say ‘frown, relax,’ have them frown a little more so you can see the movement, and we inject based on their pattern of movement.” Other dermatologists agreed with the concept of preventing facial lines by injecting neurotoxin in young adults. “The younger patients don’t need very much toxin to reduce movement that creates lines,” Kimberly Butterwick, MD, pointed out. “They’re getting a very low dose, and we’re not freezing them, so they should still look natural.” Most patients under 30 will need little to no filler, said Mary Lupo, MD, “unless they are naturally very thin, or perhaps had an eating disorder that compromised their facial fat pad. But a lot of young women in their mid- to late 20s do need Botox and benefit greatly from it.”

At the other end of the spectrum, some dermatologists are seeing an influx of patients in their 70s, 80s, and 90s. “They still feel good and they want to look good,” Dr. Butterwick said. “I love that age group because they’re a lot of fun, they have realistic expectations and are happy with any improvement. If you address the muscle movement that makes the face look sad and angry, or the downturn of the mouth — just a few key areas — they’re so happy with that.” Dr. Dover said he also sees a number of elderly patients, as well as “a surprising number of patients who have been through cancer treatment, especially breast cancer treatment. They say, ‘I’m tired of looking tired and dull; I want to start my life again.’ They’re a delight to take care of, and they’re so appreciative because they look and feel better.”



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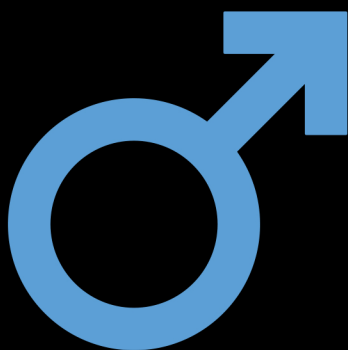
finds that Belotero also works well in this area, lasting nine months to a year. For fine lines in the neck, Dr. Butterwick turns to Belotero or Restylane Silk. To complement the filler, “we use toxin to relax the platysmal bands, which get stringy and hang as you age. This causes the bands to lay down flatter.” The masseter muscle, which can grow over time as a result of clenching the jaw or grinding the teeth, is another area that responds well to toxin injection, Dr. Butterwick said. “A large masseter muscle makes the face square and not so feminine. We can thin the masseter, and even relieve some of the tooth-grinding, by placing a few drops of Botox in the muscle.”

Wrinkles on the chest have become a more common target for the needle since practitioners began diluting Sculptra, Dr. Katz said. “It’s just in the past few years that we’ve been diluting Sculptra both for the face and the chest area,” he noted. “For the chest, which has thin skin, we dilute with about 16 cc’s of bacteriostatic water. This way we get fewer lumps and bumps, and a nice volumizing effect.”

Dr. Katz was the lead investigator in the clinical trial testing Radiesse to revolumize the hands; the indication was approved in 2015. He said the effect can last one to two years, thanks to limited movement of the back of the hand. Dr. Butterwick, who noted that Radiesse is the only filler approved for use in the hands, said, “I just had my own hands done, and I’m so happy with them. We see our own hands a lot, and the effects of aging really don’t register until you see how much better they look after treatment.” *dw*

Dr. Butterwick serves on the advisory board for Allergan, Galderma, Merz, and Suneva and is a principal investigator for Allergan. Dr. Dover is a consultant for Galderma and Merz and a principal investigator for Merz. Dr. Lupo is on the advisory boards of Allergan, Galderma, and Suneva and a principal investigator for Allergan and Suneva. Dr. Katz is on the advisory boards of Allergan and Merz.

No sex discrimination: Men want cosmetic treatment, too



Are men jumping on the Botox bandwagon? “You read a lot about how way more men are doing this, but really, way more of both sexes are coming in,” Jeffrey Dover, MD, said. “We haven’t seen significant increases in the proportion of men who come.” In contrast, Bruce Katz, MD, has seen such an increase. “Men still only account for 15 to 20 percent, but three or four years ago it was probably 7 to 10 percent.” Seth Matarasso, MD, cited a definite increase in the number of men coming to him for treatment with injectables, and attributes it in part to the competitive nature of the technology workplace in Silicon Valley. “Men in their 40s and 50s come to me and say that the paradigm has shifted: ‘I’m not just competing with my peers, now I’m competing with kids who are fresh out of college. I’ve got the experience, but I can’t look like I’ve got the experience.’”