

Experts' Sculptra Experience Places Focus on Technique

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LAS VEGAS — Poly-L-lactic acid needs to be used somewhat differently than other cosmetic fillers to correct nasolabial folds and wrinkles, and it requires more technique and more real familiarity with the product, a number of speakers said at the annual meeting of the American Society of Cosmetic Dermatology and Aesthetic Surgery.

"I think Sculptra [poly-L-lactic acid] is the most interesting filler and the most difficult to use," said Dr. David Duffy, a dermatologist who practices in Torrance, Calif., and is a clinical faculty member at the University of Southern California, Los Angeles.

"You really have to learn how to use this. I suggest that someone starts with injecting the hyalurons, then Radiesse [calcium hydroxylapatite], and then tries Sculptra," said Dr. Duffy, who is a consultant for Aventis, the maker of Sculptra.

Dr. Duffy and the others who discussed poly-L-lactic acid at the meeting talked about what they have learned in the first few years since the filler was approved for the treatment of lipoatrophy in patients with HIV and gave some pointers they have picked up.

"Sculptra has shown us a whole new venue and approach," said Dr. Gary Monheit of the University of Alabama, Birmingham.

"We're creating almost a cheek implant with Sculptra these days," added Dr. Cherie M. Ditre, director of the University of Pennsylvania's Cosmetic Dermatology and Skin Enhancement Center in Radnor.

The speakers offered a number of tips:

► **Make it painless.** The frequently recommended dilution of poly-L-lactic acid is to take the vial, which contains 150 mg of material, and dilute it with 5 mL of sterile water. Dr. Ditre said that she adds another 2 mL of lidocaine anesthetic and then gives patients about 3 mL in each cheek per session.

Dr. Duffy said he actually uses nerve blocks, and that he often uses smaller injections of lidocaine and epinephrine to help map his poly-L-lactic acid injections since the epinephrine leaves areas slightly blanched.

► **Put it deep.** Although many recommendations suggest that poly-L-lactic acid should be in-

jected into the deep dermis, Dr. Monheit said he goes deeper, just into the subcutaneous tissue.

"For me, it is all injected in the subcutaneous now," he said. "I use little aliquots, at least four sessions, each 6 weeks apart. And we see new collagen in 4-6 months."

He injects in a crisscross pattern, with a tunneling technique. One advantage of injecting into the subcutaneous space is that the material spreads out more easily, Dr. Monheit said.

► **Tap the syringe.** The material does not stay in solution, so it is necessary to tap the syringe periodically when injecting to prevent the material from accumulating at the bottom, Dr. Duffy said.

"You really have to keep snapping the syringe," he said.

Dr. Monheit said he shakes the syringe well. A 25-gauge or 26-gauge needle is recommended,

but he uses a larger one to prevent clogging.

► **Massage, massage, massage.** Each of the physicians stressed that the treating physician must massage the area after injection, and that patients must massage every day, a few times a day, for about a week after injection. The massaging spreads the material out, almost into a sheet, and prevents nodule formation, which is not uncommon otherwise, Dr. Monheit said.

► **Rejuvenate gradually.** A patient should get three separate treatments, spaced 4-6 weeks apart, and then wait before any more, Dr. Ditre said. With poly-L-lactic acid there is gradual improvement, which often takes 6 months or more to fully appear as collagen remodeling occurs.

Because of the gradual, continued improvement that patients have, it is important not to use too much and overcorrect, Dr. Monheit said.

► **What to treat.** Poly-L-lactic acid can be injected into the cheeks, the chin, and the temple, but one should be careful to avoid superficial injection, to not treat the folds themselves, and to spread the material out evenly, Dr. Monheit said.

He noted that he has used it successfully to reduce the appearance of acne scars.

The corrections associated with poly-L-lactic acid treatment are thought to last 18-24 months for most patients, but there are reports of patients having adequate correction that has lasted 5 years and more, Dr. Ditre said.

Dr. Ditre and Dr. Monheit have no relevant disclosures to report. ■



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DR. MONHEIT

Ice Cooling Provides Safe Alternative to Cryogen

LAS VEGAS — Laser treatment complications can come not just from the light; they can result from the cryogen cooling as well.

Cooling with ice offers a safe alternative for laser therapies, Dr. Ranella Hirsch said at the annual meeting of the American Society of Cosmetic Dermatology and Aesthetic Surgery.

Ice packs are cheap, reliable, and they work, she said.

The use of cryogen and other forms of cooling has been a major advance, but it is not entirely without risk, said Dr. Hirsch, who practices in Cambridge, Mass., and is president of the society.

"As any dermatologist who has performed cryotherapy knows, you can get bullae and epidermal necrosis just from the cryogen cooling," she said.

Because of the risk, Dr. Hirsch uses ice packs instead of cryogen for just about every use of the laser, she said in an interview.

She first started using the technique for hair removal, and now she has an assistant whose main job is just to do the ice cooling. The risk of cooling injury is slight, but "a little extra safety goes a long way," she said in the interview.

To test the efficacy of ice cooling, Dr. Hirsch conducted a study to look at the effects of contact cooling with ice at different skin depths, a study that was supported by a research grant from laser maker Candela Corp.

Dr. Hirsch is a clinical investigator for Candela Corp., Cynosure Inc., and Palomar Medical Technologies Inc.

In that study, she placed thermocouples connected to a computer monitoring system in ex vivo pigskin to acquire temperature and time data after ice was applied to the surface.

The top of the epidermis adequately cooled almost instantaneously, but there was very little cooling beyond 0.5-1.0 mm unless the ice was kept in place for 15 sec-

onds or longer, suggesting that the areas generally targeted by the laser would not be adversely cooled.

She found that cooling the temperature of the skin by 10° C at a depth of 1 mm, the usual depth of sebaceous glands, took 15 seconds with the ice in place, and that the temperature at 3.3 mm did not change even when the ice was kept in place for as long as 60 seconds.

It took about 4 seconds to cool a depth of 0.75 mm by 10° C and about 6 seconds to cool that depth by 15° C.

The study "strongly supports" the idea that ice-pack cooling protects the epidermis without compromising the laser's ability to heat the deeper regions where most laser targets are found, Dr. Hirsch said in the interview.

"The general take-home message with ice is that longer is better," she noted.

Cryogen cooling, on the other hand, can lead to scarring, she said in her talk at the meeting.

Dr. Hirsch showed photos of some presumably permanent injuries caused by cryogen cooling, including a small spot of hypopigmentation around the umbilicus of one patient and scarring on the back of another patient's knee that had lasted 24 months after laser treatment for a spider vein.

These types of injuries can occur when the cooling sprays get overlapped as the operator moves from one area to the next while treating.

The way to avoid any injuries when using cryogen cooling and a laser is to pay close attention to proper technique and to the changes occurring in skin as it is treated, and to be wary when patients complain of disproportionate discomfort, Dr. Hirsch said.

Dr. Hirsch said another technique that can prevent overcooling is using the back of her hand to judge skin temperature as she is cooling and treating. One can get quite good at judging when skin is too hot or too cold, she said. ■

Immune System Processes Can Trigger Silicone Reactions

LAS VEGAS — Complications from liquid silicone injections often occur when the immune system is triggered by a stimulus or an infection, according to a dermatologist with more than 22 years of experience in the use of silicone.

"I would say 80% of problems I see are associated with inflammatory events," said Dr. David Duffy, who practices in Torrance, Calif., and is a clinical faculty member at the University of California, Los Angeles.

The big problem with silicone is that it will interact with infectious processes, in-

cluding herpes infections, bacterial infections from surgical procedures, or serious dental problems such as large numbers of cavities, he said at the annual meeting of the American Society of Cosmetic Dermatology and Aesthetic Surgery.

One patient he saw developed reactions around her silicone injections when she moved into a house that had mold in the basement.

When the mold was cleaned up, her reactions went away. Another patient developed a reaction around her silicone injection when she underwent botulinum toxin

treatment, said Dr. Duffy, who did not note any relevant conflicts of interest.

Because reactions seem to be prompted when someone with silicone implants experiences an immune response, Dr. Duffy said that he avoids silicone in patients who have a history of herpes simplex outbreaks, significant dental work, allergies, and a predisposition to sinus infections.

He also does not use silicone in patients who regularly ride motorcycles because they have particulate matter hitting them in the face, and he studiously avoids using it in lips.

Despite its risks, Dr. Duffy does like to use silicone for certain applications, such as revising scars and sometimes nasolabial folds.

The use of silicone for cosmetic procedures has become an issue that is often portrayed as black and white. Either physicians use silicone and like it, or they believe it should never be used. But "I have a long experience with it and I think it is going to remain a routine practice," he said. "I can tell you that in my practice it has revolutionized some people's lives and they aren't spending a fortune on fillers. ■