Volume Replacement Tips Top Periorbital Pearls

Use patient age, overall fat distribution to guide treatment choices, troubleshoot complications.

ARTICLES BY
SHERRY BOSCHERT
San Francisco Bureau

LAS VEGAS — Periocular fat injections in thin patients are more likely to capsulize and create unsightly "hot dog" rods in the tear trough that require multiple surgeries to remove, Dr. Cynthia Boxrud said at an international symposium sponsored by the American Academy of Facial Plastic and Reconstructive Surgery.

Injected adipocytes behave differently in thin, muscular patients than in patients with more fat in their bodies, explained Dr. Boxrud of the University of California, Los Angeles. Be cautious with periorbital fillers in thinner patients, and warn them of the added risk.

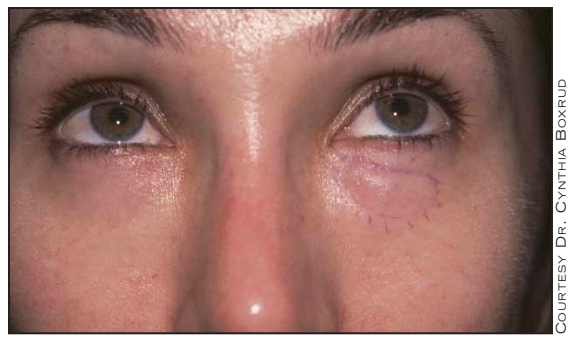
Dr. Boxrud shared other pearls for successful periorbital volume replacement at the symposium. Tear-trough augmentation is an off-label indication for injectable fillers.

The first step is to obtain photos of the patient at a younger age to get a sense of the desired look. "Our faces age like a balloon deflates," she said.

Harvest fat from another body area using a small 10-cc syringe and let the tube of fat sit upright for 10 minutes before reinjecting. It settles into three layers: a top layer of oil, a middle layer of usable fat, and a bottom layer of blood. Studies have shown that centrifuging harvested fat makes no difference for these purposes, "so you don't have to spin it," Dr. Boxrud said.

Reinject the fat into the periocular area in a vertical direction using a blunt cannula pointing away from the eye. Dr. Boxrud prefers a 1.2-mm cannula instead of a 0.9-mm because she has seen some of the smaller cannulas bend during this procedure.

Inject small amounts of fat at a time, giving 20-25 injections, and be conservative, she advised. Insert the syringe deep below the surface and only release the fat when pulling the syringe back out. "Don't inject directly into muscles. I've seen muscle wasting from this," Dr. Boxrud added.



COURTESY DR. CYNTHIA BOXRUD

Fat injection in the tear trough of this patient capsulized into a "hot dog" formation that necessitated surgical removal.

Document everything with photos and record the volume of fat injected.

Injectable collagen filler (Restylane) is another option for periorbital volume replacement. Results usually are more subtle than with fat injections, especially in younger patients.

"Young people aren't going to see great changes," Dr. Boxrud said.

Inject minimally, placing 0.2-0.3 cc under each eye via many small injections.

Results with Restylane are less successful in patients who have malar hypoplasia or translucent or thin skin. The product can cause temporary color changes in thin skin. "For the thinnest skin, use fat transplantation, not Restylane," she said. ■

Midface Fat Augmentation Is Linchpin of Full-Face Rejuvenation

LAS VEGAS — Augmenting volume in the midface area can range from rewarding to frustrating, but it's a necessary part of facial rejuvenation, Dr. Suzan Obagi said at an international symposium sponsored by the American Academy of Facial Plastic and Reconstructive Surgery.

"I typically use 20 cc of fat. That much Restylane would be equivalent to the cost of a facelift."

DR. OBAGI

"If we want to accomplish full-face rejuvenation, we have to augment the midface region," said Dr. Obagi, who is director of the Cosmetic Surgery and Skin Health Center at the University of Pittsburgh.

The literature lacks human studies of the best techniques and patient selection, so Dr. Obagi shared tips from her own experience.

She prefers using autologous fat transplantation for the midface area because of its many advantages.

"It's the closest we have to an ideal filler," she said.

Autologous fat is nonallergenic, and there's no risk of transmitting HIV, hepatitis, or other diseases.

Fat usually is available in relative abundance for harvesting, and it takes on the properties of the tissue into which it is injected. Although some clinicians have reported dissatisfaction with the duration of fat injections, the procedure has the potential to last many years, depending on patient selection and on the quality of the fat that is harvested.

In Dr. Obagi's practice, autologous fat augmentation in the midface area lasts about 3 years, she said.

Fat transplantation also is cost effective for patients. "I typically use 20 cc of fat. That much Restylane would be equivalent to the cost of a facelift," she commented.

The best patients are younger—under age 55 years—because they have healthier, better fat. The ideal patient is a nonsmoker with a normal or above-normal body mass index, no prior facial surgery, and good skin tone and skin thickness.

"I'm convinced that patient age is the key factor to decide between one, two, three, or four" sessions of fat transplantation, Dr. Obagi said. In younger patients, one fat transplantation might be sufficient, but older patients could need two or more sessions. Prepare older patients for the possibility of multiple sessions.

Thicker skin is more forgiving and less likely to show lumps after fat transplantation.

Heavier patients tend to have better outcomes after midface fat augmentation than do thinner patients, but the thin ones might be in greater need of the procedure. The best combination might be a patient with a thinner face but more body fat than normal, Dr. Obagi suggested.

Fat will not fill in wrinkles from sun damage, she noted; those are better treated with laser resurfacing.

Assess the facial volume loss to decide where to transfer the fat. Likely sites include the forehead, brow, temples, intraorbital areas, regions of malar atrophy, lateral cheeks, jawline, chin, and perioral areas.

Results may be less satisfactory in patients with prior facelifts, eye lifts, brow lifts, cheek implants, or permanent fillers. Avoid fat augmentation in patients with prior transcutaneous lower blepharoplasty, because the fat injection can cause prolonged edema, she warned.

It's probably also wise to avoid midface fat augmentation in patients with unrealistic expectations, those with malar festoons, and tobacco users, she said, adding that some medications are contraindicated with this procedure.

Prednisone impairs healing. Depression may be triggered in patients on antipsychotic agents, Dr. Obagi said. Aspirin, NSAIDs, or warfarin can cause bleeding that harms the transplanted fat's life span. ■

Predictability, Cost, and Results Favor Chemical Over Laser Peels

LAS VEGAS — When it comes to facial peels, Dr. Devinder S. Mangat has traveled full circle—going from chemical peels to using lasers and back again.

After 16 years of doing chemical facial peels, Dr. Mangat switched to laser peels "because that's what the public was demanding," he recalled at an international symposium sponsored by the American Academy of Facial Plastic and Reconstructive Surgery.

About 8 years ago, though, he switched back to using chemicals because they provide more predictable outcomes, cost less than lasers, and produce better results than noninvasive modalities, he said.

Using the more modern Hetter peel solution instead of the traditional Baker-Gordon formula offers greater flexibility in treating different facial areas with less risk of hypopigmentation, added Dr. Mangat, president of the American Board of Facial Plastic and Reconstructive Surgery.

The traditional Baker-Gordon formula contains a 58% concentration of phenol and a 2.1% concentration of croton oil among its ingredients. A few years ago, however, Dr. Greg Hetter of Las Vegas varied the formula's concentrations and discovered that the depth of peel was related to the concentration of croton oil, not the phenol or Septisol, as had been believed.

Dr. Mangat uses different concentrations of the Hetter formula for peels on different facial areas in his practices in Cincinnati and Vail, Colo.

Hetter solutions maintain a lower and constant concentration of phenol—35%—while varying the croton oil concentration in a mixture of water, phenol, Septisol, and croton oil, he explained.

In general, Dr. Mangat prefers a Hetter formula with 0.8%-1.2% croton oil for perioral skin, which is thicker and has deeper rhytids: "Really get into those rhytids either with a Q-tip or the broken end of a Q-tip," he said.

He prefers applying the solution with a cotton-tipped applicator rather than gauze sponges for better control.

For peeling the cheeks and forehead, he usually limits the formula to no more than 0.4% croton oil. Eyelids may require anywhere from 0.1% to 0.4% croton oil, depending on the thickness of the skin and the depth of the rhytids, he said at the meeting.

Dr. Mangat also uses the Hetter formula on the neck, but at nothing stronger than a 0.1% croton oil solution.

Since switching to the Hetter formula, he has not had any cases of hypopigmentation after peels.

With Hetter peels, "once you've selected and prepared patients carefully, they will be, without a doubt, the happiest patients you have in your practice," he predicted. ■