## Ask About Filler Use Before Injecting New Patients

BY DOUG BRUNK
San Diego Bureau

LAS VEGAS — Time after time, Dr. Martin Braun encounters new patients in his Vancouver, B.C.-based practice who have undergone previous cosmetic filler treatments in Europe as well as Asia, but who have no idea what product was used.

Determining product history can be a daunting task because there are more than 100 cosmetic fillers currently being used in the European Union (EU), Dr. Braun said at the annual meeting of the International Society for Dermatologic Surgery.

"Frequently, we have to contact the physician, and I'm introduced to a new filler," he said. "Considering today's sense of a global village, I think it's important for physicians in North America to be familiar with some of these products." Filler products approved for use in the EU are designated with a so-called CE mark, which does not indicate conformity to a standard but rather conformity to the legal requirements of EU directives.

"There may not have been any human trials done on the filler," Dr. Braun said. "It could be something as simple as a certified quality system to ISO 9000 and that's it." (ISO is the International Organization for Standardization.)

He highlighted the following products to keep on the radar:

▶ Evolence (ColBar LifeScience Ltd.). Approved in Canada in 2006 and in the United States in 2008, this product contains 35 mg/mL of porcine collagen (telopeptides removed) cross-linked with D-ribose (nontoxic). No skin testing is required and studies have shown that results last up to 12 months.

However, using it for lip augmentation has resulted in several cases of nodule formation, Dr. Braun said. Of 20 patients he treated in 2006, 16 developed multiple lip nodules that have persisted in one-quarter of the cases for nearly 2 years. "Be very cautious with this product in and around the lips," Dr. Braun said.

He did not evaluate Evolence Breeze, which is said to be less problematic in the lips.

▶ Radiesse (BioForm Medical). Data from clinical studies suggest that this Food and Drug Administration—approved product lasts a few more months than do hyaluronic acid (HA) fillers. "It's the filler of choice for me for very

deep nasolabial folds in men, as it appears to lift better than many hyaluronic acid fillers," Dr. Braun commented. "The one disadvantage is that 70% of that Radiesse syringe contains a gel carrier that disappears in 3-4 months. You have to warn the patient[s] of this because they will see a huge decrease in their filling after 3-4 months and have to be injected again." In his experience, Radiesse tends to bruise more than other fillers, feels indurated for the first few weeks, and can't be dissolved with anything.

- ▶ Juvéderm (Allergan Inc.). Developed from *Streptococus equi* fermentation, this FDA-approved product "is very similar to Restylane [Medicis Aesthetics Inc.], but it's not as stiff," Dr. Braun said. "So if you want a skin-stiffening agent to perform the fern injection techniques, Restylane will likely do a better job for you." Juvéderm with lidocaine just became available in Canada but is not yet available in the United States. Dr. Braun predicted that this will become his filler of choice for patients who do not wish to have a proper dental block performed.
- ▶ Sculptra (Sanofi-Aventis). This product is FDA approved for HIV-associated facial lipoatrophy, but in Canada, it's approved for dermal contouring of the face in all patients. Dr. Braun said he uses Sculptra (poly-L-lactic acid) filler in patients with marked hollowing of the buccal fat pads and temporal fat pads and in those with thin skin, because after it's injected "the skin gets a nice glow, similar to [what] you obtain with IPL [intense pulsed light] photorejuvenation."
- ▶ Atléan (Stiefel Laboratories Inc.). Purchased by Stiefel in 2008, this product contains hyaluronic acid mixed with tricalcium phosphate. "The idea is that the tricalcium phosphate stimulates new collagen formation which is long lasting, like that associated with calcium hydroxyapatite," Dr. Braun said. In split-face injections, Dr. Braun had to use 5 cc of Atléan for 4 cc of Radiesse to get a similar correction. "So Radiesse will have a competitor here," he said. "And unlike Sculptra (where the water absorbs in 2 days), the immediate volumization achieved with Atléan will endure due to the HA component."

Atléan is not approved for use in the United States.

▶ Laresse (FzioMed Inc.). This polyethylene oxide product is marketed as being nonanimal, nonbacterial, nonpermanent, nontoxic, and nonparticulate—"everything we would want in a filler," Dr. Braun said.

However, when he injected it into the glabellar folds of



"Be very cautious," when using Evolence in the lips, said Dr. Martin Braun. Nodule formation—as shown in the patient above 15 months after injection—can occur.

two patients, induration developed that lasted more than 3 weeks. "I don't think it has a future, because when you inject it, you get an induration."

Laresse is not approved for use in the United States.

- ▶ ArteFill (Artes Medical Inc.). This FDA-approved product is a successor of Artecoll, a formulation of polymethyl methacrylate (PMMA) spheres suspended in collagen that was found to cause a high incidence of lumps when injected into the lips and delayed granulomatous reactions in the face. "Now the product's PMMA crystals have been polished, and it's being marketed as ArteFill," Dr. Braun said. "Many of the complications I saw came out in year 7, so be very careful injecting this. It remains to be seen if this product is safer than Artecoll."
- ▶ DermaLive and DermaDeep (DermaTech). This permanent filler, a combination of polyethyl methacrylate and hyaluronic acid, was withdrawn from France in 2003 and later from Canada because nodules and granulomas were reported years after injection.

"I ask patients on my medical history sheet if they've had this filler, because if you inject other things in a DermaLive recipient, you can activate a foreign body reaction," Dr. Braun said.

Dr. Braun disclosed that he has received honoraria from Medicis, which markets Restylane, and Allergan, which markets Juvéderm. He owns no stock in either company.

## Research Institute to Study the Genetics of Skin Appearance

BY MARY ELLEN SCHNEIDER

New York Bureau

Within the next 5 years, researchers at the University of Miami's newly launched Cosmetic Medicine and Research Institute hope to make a major genetic breakthrough related to skin appearance.

Dr. Leslie Baumann, a cosmetic dermatologist who directs the Cosmetic Medicine and Research Institute (CMRI), said that she and her colleagues will team up with researchers at the university's Miami Institute for Human Genomics to conduct basic science to find the genetic factors that protect some individuals from the effects of skin aging. For example, Dr. Baumann has about 20 patients over age 60 whose skin is in excellent shape despite engaging in years of harmful behaviors such as tanning and smoking.

"Hopefully we'll come out with discoveries of new medications and new treatments that will help dermatologists have more in their armamentarium," she said.

In an effort to make a significant genetic discovery, researchers at CMRI have cre-

ated a skin repository. Instead of discarding extra skin after surgery, patients can choose to donate it. The skin, and information on its phenotype, are being stored for future research. The phenotype information can be especially helpful in identifying genes, Dr. Baumann said.

The repository could help reduce both the cost of cosmetic research and the need for animal testing, she said. For example, a pharmaceutical company testing a new acne drug could use skin

collected from individuals with acne. The CMRI researchers will also collect extra fat from liposuction procedures and use it for stem cell research.

CMRI was launched in August, and is believed to be the first multispecialty, university-based research center to explore the role of genetics in skin appearance.

The CMRI staff includes experts in cosmetic dermatology, facial plastic surgery,



CMRI's faculty includes Dr. Leslie Baumann (third from left) and Dr. Heather Woolery-Lloyd (third from right).

oculoplastic surgery, and nutrition. The dermatology faculty includes experts in skin care and fillers, cosmetic surgery, lasers and light devices, and ethnic skin care.

"Most of the time these specialties compete against each other," Dr. Baumann said. "We're teaming up." The multispecialty team approach is helpful across the board in research, education, and day-to-day activities in the clinic.

About 65 residents a year are being trained at the CMRI clinic, of whom 22-25 on average are coming from dermatology. Since it is a multispecialty clinic, residents rotate not only with faculty in their specialty but with other experts, Dr. Baumann said.

The multispecialty nature of CMRI also lends itself to easy consults, said Dr. Heather Woolery-Lloyd, director of ethnic skin care. She performs a lot of skin tightening, but a patient who is a better candidate for a face lift can be sent to a colleague and never has to leave the practice.

"I love practicing in this environment," Dr. Woolery-Lloyd said. "It really does give you the opportunity to provide patients with the best care."

She predicts that more private practices will use the multidisciplinary team approach as a way to expand. Instead of hiring another cosmetic dermatologist or a nurse practitioner, practices can recruit someone who does facial plastic surgery or an ophthalmologist who does oculoplastic and reconstructive surgery, Dr. Woolery-Lloyd said.