

Deep Filler Injections Tackle Aging Bone Structure

BY CAROLYN SACHS
Contributing Writer

WAIKOLOA, HAWAII — Deep filler injections can address volume loss that occurs in facial bone structure during the aging process, according to Dr. Howard K. Steinman.

"The shape and volume of the maxilla and mandible change with aging," Dr. Steinman said at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation.

"This significantly contributes to facial age-related cosmetic deformities," he added.

Injecting fillers deep, near the periosteum, can address these issues, he said. Although this has been well documented in plastic surgery literature, it is probably a new concept for most dermatologists.

Dr. Steinman, who is in private practice in Chula Vista, Calif., said that he first became aware of the clinical importance of facial skeletal movement last year at SDEF in Hawaii during a workshop that was led by Dr. William Philip Werschler of the University of Washington, Seat-

tle, and Dr. Danny Vleggaar of the Nouvelle Clinique Vert Pré, Geneva.

"Ever since I discovered this and researched it, it has altered the way that I see my cosmetic patients and how I use fillers," he said. "Understanding these changes often permits more effective correction with less filler volume."

Dr. Steinman described the maxilla as a "ledge of the midface tissues." As the maxilla moves inferiorly and posteriorly, the muscles and other soft tissues attached to it descend. This aging process is in addition to laxity and the loss of fat volume over time. Lateral tear troughs, for example, begin to form as a result of the descent of the maxilla causing enlargement of the orbital rim, in addition to the soft tissue changes.

Putting filler immediately above the periosteum replaces orbital rim that has moved. "You're going to lift up the tissues, and you're going to help redrape and eliminate the lateral tear trough," he said, noting that

he routinely does this using Radiesse (BioForm Medical).

When working on nasal labial folds, Dr. Steinman angles the needle down all the way to the periosteum and injects as he pulls back slightly—a technique he learned from Dr. Vleggaar.

Facial skeletal changes will be perceived by dermatologists in the same way that facial muscles are now perceived.

DR. STEINMAN



He imagines a triangle in the corner of the nose and the nasal labial fold.

"I do three injections from the inferior apex of the triangle, injecting superiorly and filling this triangle," he said. "This is a great technique for doing rejuvenation

of this fold with very little filler." The mandible also changes as patients get older, he said. The height of the mandible shortens, which the muscles and soft tissue attached to the mandible rim have to accommodate for, resulting in "jowling" and the formation of prejowl sulcus.

To correct this problem, he injects deeply along the mandibular rim "bulking it up" as best he can before injecting into the subdermal plane. Again, a small quantity of filler can be used in this procedure, he noted.

With the advent of botulinum toxin type A, said Dr. Steinman "all of us that were 'pre-Botox' in our training suddenly learned to see facial muscles and their cosmetic effects," he said. "They're part of [the] assessment armamentarium."

He predicted dermatologists will start to perceive facial skeletal changes the same way they now perceive facial muscles and will adapt treatments accordingly.

Dr. Steinman disclosed that he had no relevant conflicts of interest.

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PHOTOS COURTESY DR. HOWARD K. STEINMAN

Dr. Steinman suggests imagining a triangle in the corner of the nose and nasal labial fold (before, left image). Perform "three injections from the inferior apex of the triangle, injecting superiorly and filling" it (after, right).

Follow-Up Study Finds Calcium Hydroxylapatite Safe at 4 Years

BY GREG MUIRHEAD
Contributing Writer

WAIKOLOA, HAWAII — Calcium hydroxylapatite, injected as an implant for soft-tissue augmentation of the nasolabial folds and other facial areas, was safe after 4 years of follow-up in a two-center study of over 100 patients.

The investigators found that results lasted about 8 months for the majority of patients; results lasted longer (about 10-12 months) in patients who received multiple injections and touch-up sessions.

Dr. Bruce E. Katz of the department of dermatology at Mount Sinai School of Medicine, New York, described the findings (*Dermatol. Surg.* 2007;33:122-7) during a presentation at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation.

The 113 patients in the study ranged in age from 26 to 78 years; 100 of them were women. The nasolabial folds were injected in 86 patients. A single injection was given at a single session to 75 patients (66%), and 38 (34%) had more than one session, said Dr. Katz. Most patients were given a 1-mL injection of calcium hydroxylapatite at a session; 12 were given a 2-mL injection.

Calcium hydroxylapatite (Radiesse) is a synthetically sourced, semipermanent, soft-tissue filler that comprises 25- to 45-mcm

microspheres suspended in an aqueous gel. The microspheres "form a scaffold for tissue growth," he said. The calcium hydroxylapatite particles degrade over time to calcium particles and phosphate ions. "This material is highly biocompatible, it's durable, it does not migrate, it's not antigenic, and it's [radiopaque]."

Seven patients in the study reported adverse events, which were short term and minor, resolving within a month, according to Dr. Katz. These adverse events included three cases of transient ecchymoses, two patients with inflammation and edema, and two with nongranulomatous submucosal nodules of the lip.

A subset of 41 patients rated efficacy of treatment on a scale of 1 (satisfactory) to 5 (excellent), he said. The mean score of visual satisfaction after treatment was 4.6. The mean scores of those physicians who rated results using the same scale were 4.5 for visual satisfaction and 4.6 for the feel of the implant. At 6 months' follow-up, patients' mean scores were 4.8 for visual satisfaction and 4.9 for the feel of the treatment; physicians' mean scores were 4.5 for visual satisfaction and 4.9 for feel.

Dr. Katz has received compensation from BioForm Medical Inc. for making presentations on calcium hydroxylapatite.

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Eye Shield Use During Laser Procedures Strongly Advised

BY CAROLYN SACHS
Contributing Writer

WAIKOLOA, HAWAII — Dr. Roy G. Geronemus warned against the cavalier approach of not using eye shields during laser surgery.

"The eyelid is very thin," he observed at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation. When using a device that works at 1.5 mm, "you damned well better" protect the patient's eyelids.

"With the CO₂ lasers, I think you should put a shield underneath the eyelids if you're treating the lids." Because it is possible that plastic shields will melt, said Dr. Geronemus of the New York University Medical Center, he prefers to use metal eye shields.

In a subsequent presentation, Dr. R. Rox Anderson, professor of dermatology at Harvard Medical School, Boston, and director of the Wellman Center for Photomedicine at Massachusetts General Hospital, also advocated for routine use of an eye shield, "especially if you're going to be treating inside the bony orbit."

Both lasers and intense pulsed lights used for hair removal in this area can be extremely damaging to the patient's eyes, he noted. "These devices are made

to kill melanin-containing structures at great depth in the tissue, and the greatest amount of melanin in the body is in the uveal tract and the retina," Dr. Anderson said. "They're retinal killers."

Eye shields can also protect against possible injury from cryogen spray, he said. "There are cases of cryogen spray freezing the cornea and hurting it."

Dr. Anderson cautioned not to let anesthetics get under the eye shields when inserting them. "Most of our anesthetics, particularly EMLA [combination lidocaine and prilocaine cream], are really quite irritating," Dr. Anderson said, and can cause corneal burns.

Dr. Anderson disclosed that he had no relevant conflicts.

Dr. Geronemus disclosed that he is a shareholder in Thermage Inc., Reliant Technologies Inc., and Light BioScience LLC.

He is on the medical advisory boards of PhotoMedex Inc., Lumenis Ltd., Rhytec Inc., Candela Corp., Zeltiq Aesthetics, and Skin Cancer Company, and is an investigator for Reliant Technologies, Medicis Pharmaceutical Corp., Rhytec, DUSA Pharmaceuticals Inc., L'Oreal, Cutera Inc., Allergan Inc., and DermTech International. SDEF and SKIN & ALLERGY NEWS are wholly owned subsidiaries of Elsevier. ■