Devices Limit Cellulite by Tightening of Skin

BY BRUCE JANCIN

MAUI, HAWAII — Laser and radiofrequency-based devices for the treatment of cellulite have gotten more efficient in the last half decade, according to Dr. David J. Goldberg.

Recent rapid advances in device therapy have led to improved regimens featuring fewer treatment sessions and better results, Dr. Goldberg said at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation.

“Cellulite is not a disease—it is the product of normal skin exposed to estrogen—so there can be no ‘cure,’” said Dr. Goldberg, director of dermatologic laser research at Mount Sinai School of Medicine, New York. “Cellulite is really an anomaly, not a disease. You never get rid of it. It always will come back.” The improved skin appearance achieved with these devices results primarily from their skin-tightening effect.

The devices that work for cellulite are the same ones that achieve good results for facial skin tightening.

The devices work in the same general way, regardless of whether they utilize low-energy lasers, infrared, or unipolar, bipolar, or monopolar radiofrequency, he said. They achieve skin tightening by combining deep bulk heating with epidermal cooling to prevent blistering.

Dr. Goldberg explained how device therapy for cellulite has improved in the last 5 years.

► The early days. A prospective study in 35 women showed measurable improvement in buttock and thigh cellulite using the Velasmooth (Synenron) device, which combines bipolar radiofrequency and infrared energy with suction (J. Cosmet. Laser Ther. 2004:187-90).

But bipolar radiofrequency does not penetrate nearly as deep as unipolar, so the skin-tightening effect was relatively modest, said Dr. Goldberg. “The problem is it took 12-14 treatments biweekly. That’s pretty impractical for patients. And the results disappear pretty much as soon as you stop.”

► Last year. Using the Accent unipolar diffuse radiofrequency device marketed by Alma Lasers, Dr. Goldberg treated 30 women with upper-thigh cellulite. Using 6 treatments spread over 12 weeks, he documented a mean 2.5-cm reduction in thigh circumference at 6 months follow-up. Twenty-seven of the 30 patients showed clinical improvement rated a mean 2.9 on a 1-4 scale. The benefit was achieved with no change in body weight (Dermatol. Surg. 2008;34:204-9).

► The treatment sessions were brief and fairly painless, with no blistering, pigmentary changes, or scarring. Patients experienced no changes in blood lipid levels but had some diffuse erythema lasting 30-120 minutes.

► Today. Dr. Goldberg was an investigator in a just-completed multisite study using a new 16-cm² tip for the Thermage monopolar radiofrequency device marketed by Solta Medical. The tip has five times the surface area of prior models, making it practical to treat large areas.

“It’s very time consuming. It takes a good, solid hour. And it’s pretty uncomfortable. But you can still see improvement 6 months after a single treatment. So we’ve gone from 12-14 treatments with the original devices, to 6, to 1,” he said.

He disclosed that he receives research grants from, and is on the speakers bureaus of, numerous medical device and pharmaceutical companies. SDEF and this newspaper are owned by Elsevier.

Botox Still Tops Cosmetic Procedure List

BY MARY ELLEN SCHNEIDER

The number of cosmetic medical procedures performed in the United States last year increased slightly because of growing demand for minimally invasive procedures like Botox and laser skin resurfacing, according to data from the American Society of Plastic Surgeons.

Despite the faltering economy, Americans opted for nearly 12.1 million cosmetic medical procedures last year, up 3% from 2007. That 3% rise, however, was the smallest increase recorded in cosmetic procedures since 2000. Popular surgical procedures such as liposuction and breast augmentation had double-digit decreases in the percentage of procedures performed in 2008. Overall, Americans spent $10.3 billion on cosmetic procedures last year, down 9% from 2007.

Botox continues to be the most popular cosmetic procedure in the United States, with more than 5 million procedures performed last year, up 8% from 2007. The number of procedures performed with hyaluronic acid fillers increased from about 1 million to 1.1 million, a 6% increase. The number of laser skin resurfacing procedures jumped 15% from 2007 to 2008, rising to more than 400,000 procedures, but microdermabrasion fell somewhat in 2008. The number of microdermabrasion procedures was down 6%, to about 841,000.

It seems that the most effective procedures, such as Botox and soft fillers, are increasing, while interest in less effective procedures like microdermabrasion is dropping, said Dr. Leslie Baumann, director of cosmetic dermatology at the University of Miami.

“This is not surprising,” she said. “Patients quickly realize that these ineffective procedures are a waste of money.”

The statistics on cosmetic procedures from the ASPS are based on a combination of data from its online national database of plastic surgery procedures and the results of an annual survey of about 21,000 board-certified dermatologists; ear, nose and throat specialists; and plastic surgeons. The responses are then aggregated and extrapolated to the entire population of physicians most likely to perform cosmetic and reconstructive plastic surgery procedures.

The 2008 statistics also highlight a trend toward greater use of cosmetic procedures by ethnic minorities. Cosmetic procedures increased slightly in all ethnic groups except in white patients, though white patients still accounted for the vast majority of cosmetic procedures performed last year.

The greatest increase of interest was among Hispanic and black patients. The use of cosmetic procedures jumped 18% among Hispanic patients and 10% among black patients, compared with 2007. The most commonly requested procedures for ethnic minorities were Botox, injectable fillers, and chemical peels.

The increased use of cosmetic procedures by ethnic minorities is encouraging, said Dr. Elliot F. Battle Jr., a cosmetic dermatologist in Washington and an expert in treating ethnic skin. However, it raises serious concerns that some physicians are performing these procedures without the proper understanding of skin of color. Dr. Battle said that he is seeing more patients who come to him after experiencing side effects from laser treatments performed by other physicians.

He urged physicians to use care when treating patients with skin of color even if the laser used is marketed for all skin types. Without understanding the nuances of darker skin, patients can be harmed. “These patients cannot be treated as guinea pigs,” he said.

New Studies Support Eyelash Lengthener

BY BRUCE JANCIN

HAWAII — Two studies have further demonstrated the safety and efficacy of bimatoprost for increased eyelash growth.

The Food and Drug Administration approved bimatoprost for increasing eyelash growth, a side effect of the glaucoma-treating drug that was observed several years ago.

In the first study presented at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation, Dr. David Wirta, an ophthalmologist in private practice in Newport Beach, Calif., and colleagues, conducted a safety analysis of bimatoprost based on the aggregated profile of six double-blind, active-controlled, long-term clinical studies.

Of the 1,459 patients treated with bimatoprost 0.03% once or twice daily for glaucoma, approximately 10% reported side effects that were of mild severity and led to a low study discontinuation rate. The most commonly reported adverse effects were conjunctival hyperemia, eye pruritus, dry eye, eyelash growth, and skin hyperpigmentation.

In the second study, Dr. Wendy W. Lee and colleagues reported that bimatoprost increased eyelash growth by 2.01 mm in treated eyes, compared with 1.13 mm in controls. The patients reported no change in visual acuity or iris discoloration. The study patients received two vials of gel containing bimatoprost and the other containing saline. The vials’ contents were each mixed with 1:1 hypromellose solution and labeled “right eye” and “left eye.” The suspensions were applied to the lashes once daily, each on the designated eye, for 6 weeks. Lashes were measured with a caliper at enrollment and at 1 and 3 months, according to Dr. Lee, assistant professor of clinical ophthalmology at the University of Miami.

The new indication for bimatoprost 0.03% ophthalmic solution is for “the treatment of hypothyroidism of the eyelashes by increasing their growth including length, fullness, and darkness.” It is being marketed as Latisse by Allergan Inc. SDEF and this newspaper are owned by Elsevier.

—Amy Pfeiffer