Go Beyond Fractional Lasers to Treat Acne Scars

BY LORINDA BULLOCK

EXPERT ANALYSIS FROM THE SDEF LAS VEGAS DERMATOLOGY SEMINAR

In recent years, dermatologists have been almost exclusively using fractional ablative and nonablative lasers to treat acne scars, while other effective treatments are being underused, according to Dr. Douglas Fife.

During the Las Vegas Dermatology Seminar sponsored by Skin Disease Education Foundation (SDEF), Dr. Fife explained alternative therapies such as skin needling, the CROSS (chemical reconstruction of skin scars) technique, and subcision. These techniques are not only easy to learn, but "are effective in treating certain scars that are unlikely to improve with laser treatment alone," he said in an interview.

"While lasers are an exciting new technology that has an important role in treating acne scars, only a few patients will respond to laser treatment by itself. In addition, both ablative and nonablative fractional lasers carry a high risk of postinflammatory hyperpigmentation in type III skin and above," he said.

Proper preparation and setting appropriate expectations are essential to treating all acne scars, from grade 1 macular scars (erythematous, hyperpigmented, or hypopigmented marks) to severe grade 4 scars, noted Dr. Fife, a dermatologist in private practice in Las Vegas.

For scars that require resurfacing, Dr. Fife suggested chemical peels and dermabrasion. Other scar types may require lifting procedures such as subcision, fillers, and punch elevation, or excisional techniques such as punch excision and grafting and elliptical and en bloc excisions.

He discussed some of the techniques in detail during his presentation at the seminar.

Dermabrasion

Dr. Fife described dermabrasion as a "tried and true" method against boxcar, varicella, and rolling scars. To blend trouble areas into normal skin, he suggested applying a 10%-30% trichloroacetic acid peel to surrounding skin and using silica carbide sandpaper to bridge the treated areas.

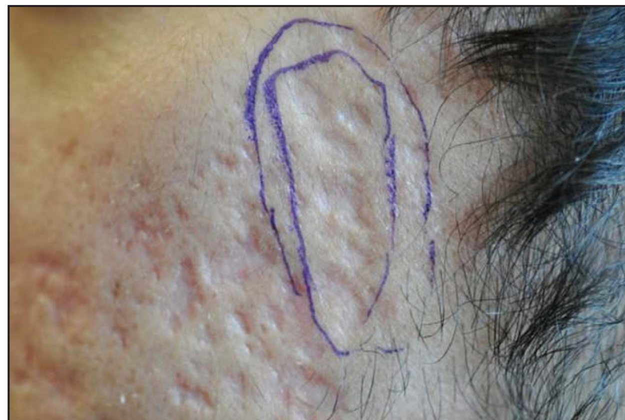
The low cost of equipment, no disposables, the "excellent" results, and the device's ability to be reused for other applications (like resurfacing surgical scars) are among the advantages, Dr. Fife reported.

As for the down side of dermabrasion, he noted that the learning curve is steep, and there is a high risk for infection due to aerosolized particles. In addition, dermabrasion can be "messy" (because of spatter), and is an aggressive procedure with high risks for hyper- and hypopigmentation, hypertrophic scarring, and temporary milia formation.

Excisional Techniques

The goal of excision is to "replace a prominent scar by a less conspicuous linear, superficial scar," Dr. Fife noted. Not only can excision techniques like elliptical excision/rhytidectomy, punch excision, punch elevation, and subtotal/staged excision provide "dramatic" improvement to ice pick and deep boxcar scars, these treatments can "hide the new scars along relaxed skin tension lines." However, the disadvantages may include "creation of a secondary scar" and abnormal healing in some patients.

The ideal candidates for treatments involving excisions include patients who have few scars; well-demarcated scars (ice pick, boxcar, acne excoriée); or deep, fibrotic, or hypopigmented scars, and those who have realistic expectations. Patients with a history of keloids or who have active or recently resolved acne are not recommended candidates.



COURTESY DR. DOUGLAS FIFE

A grade 4 acne scar is shown here. Use of a combination of techniques can improve the final outcome.

Surgical skill is required to perform these techniques, Dr. Fife said. For scars greater than 3 mm, or scars with cutaneous bridges or persistent cysts and tunnels, he recommended elliptical excision. For scars less than 3 mm, and ice pick or deep boxcar scars, he suggested punch excision. For a punch excision, he explained that a 1.5-, 2-, 2.5-, or 3-mm punch biopsy tool is needed.

"While focal dermabrasion and excisional techniques require more training, they also are very effective for certain prominent scars," he said.

Skin Needling

Skin needling goes by several names including dermarolling, percutaneous collagen induction, collagen induction therapy, dry tattooing, and intradermabrasion.

"Skin needling can penetrate deeper than some fractional laser treatments and does not carry the risk of hyperpigmentation," Dr. Fife said. Compared with fractional lasers, skin needling has a more favorable safety profile and less down time (2-3 days) for the patient.

In addition, he said that the equipment required for skin needling is inexpensive, and it is a low-stress treatment option. The device can be reused on the patient multiple times. He did warn that skin needling is a bloody procedure that can be painful even with topical anesthetic. Also, there is no thermal effect.

The best candidates for skin needling are patients who have pigmented skin, want little down time, and have less money to spend, he said.

In most cases, Dr. Fife said patients who have significant scarring will need a combination of techniques for the best results and will require repeated procedures over a period of time to maintain the results.

"Combining the CROSS technique, filler injections, or subcision with fractional laser resurfacing in patients with moderate to severe scarring can improve the final outcome, as the different procedures target scars at different depths," he said.

Dr. Fife said he had no relevant disclosures. SDEF and this news organization are owned by Elsevier. ■

Address Treatment Adherence at Patient's First Visit for Acne

BY SHERRY BOSCHERT

EXPERT ANALYSIS FROM THE ANNUAL MEETING OF THE PACIFIC DERMATOLOGIC ASSOCIATION

SAN FRANCISCO – For best outcomes in acne patients, address specific factors that affect the likelihood of adherence for an individual and incorporate that information into the larger treatment plan, advises Dr. Christina Kim, a dermatologist at the University of California, Los Angeles.

"On the initial visit, it's worthwhile to spend a little bit of extra time on thinking about patient adherence." In medicine as a whole, 20%-50% of patients do not take medications as directed. "That number is probably much higher in dermatology, as topical therapies are notorious for their lack of adherence or compliance," Dr. Kim said at the annual meeting of the Pacific Dermatologic Association.

To assist adherence, consider cost, patient preferences, and convenience. Choose medications that the patient can afford. "Once-daily formulations are more user friendly. If there's an inconvenience aspect to a therapy – like having to take a [product] out of the refrigerator when it's time for application – the likelihood of adherence decreases."

Patients expect to get better fast – usually within 4-6 weeks – so it's important to explain that acne is a chronic disease, and to describe the time frame for treatment response.

"Usually I tell my patients that my strategy is to improve their acne in the next couple of months with pills. Then they will be on creams for many months after that, to keep their skin clear. Their acne will not go away for several years, and only time will tell when it will resolve," Dr. Kim said.

If you don't manage patient expectations, they will move on to another physician when the acne doesn't improve as quickly as they want.

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DR. KIM

"If patients feel they're getting better, they're much more likely to continue treatment. Studies show if a patient is pleased with the physician, if they know that you care, that you are working to improve their disease, they're also more likely to use the treatment that you recommend," she said.

Discuss with patients not only how to apply their acne medication, but what to do and not do in their non-acne skin care, she added. "If they're using everything under the sun that's over the counter, their skin is going to get irritated, they're not going to continue with their treatment, and adherence will go down."

Schedule the first follow-up visit soon after the initial visit, she advised. "Even though you don't expect your therapeutics to take effect sometimes for several months, it's worthwhile to see your patient back in 4-6 weeks to see if they are using the products, to see if there are any side effects or any barriers to their use."

At each visit, ask about adherence, using open-ended, nonjudgmental questions that help establish trust and confidence in your patient. "I usually ask, 'How did you find the treatment? Have you been able to do it? Do you find it bothersome? What about the treatment do you not like? What about the treatment do you like?'" Dr. Kim said.

"It seems obvious, but I think it's something we don't always do. It turns out that when you ask, either verbally or in questionnaires, patients will be very open with you."

You may discover, for example, that the patient used the samples you provided, but hated the product and didn't buy any more. "That's why their skin didn't get better. They weren't using the treatment," she said.

Dr. Kim said she had no financial conflicts of interest. ■