

Advancements in Laser and Light Technologies

Ellen S. Marmur, MD

The American Society of Cosmetic Dermatology & Aesthetic Surgery had a wonderful year, hosting 3 successful regional workshops and our amazing comeback annual meeting. A big part of the success was due to the vast interest in new laser and light technologies. This commentary will discuss several laser and light devices as well as alternative technologies for skin rejuvenation, scar treatment, and fat reduction.

This year we saw a number of new laser and light devices for rejuvenation and scar treatment. Fractional CO₂ devices are well priced and extremely effective. If you have not worked with one yet, try the CO₂RE fractional laser (Syneron Medical Ltd), the DeepFX and ActiveFX (Lumenis Aesthetic), or the Fraxel re:pair laser (Solta Medical, Inc). These are 3 of a cadre of similar systems. They are powerful yet safe lasers for rejuvenation. I have used them with success for nonsurgical blepharoplasty; acne scars; scars from Mohs micrographic surgery; and full face, neck, and chest resurfacing.

Using a combination of modalities within the same treatment session will provide a personalized treatment plan for each patient. Although I was reluctant to increase my patient's risk profile by offering fractional CO₂ lasers, I have found that incorporating this laser into the patient's treatment plan is both safe and effective. For example, fractional CO₂ lasers are effective for the treatment of scars from breast cancer surgery. Although these scars typically have prolonged healing time, treatment with a fractional CO₂ laser seems to melt the scars away in my experience. One of my patients with scars on her nose and central face from blood vessel removal treatments that she received at a spa was treated with 1 session of Fraxel re:store (Solta

Medical, Inc), and the CO₂RE fractional laser. When she returned for a follow-up visit after 1 session, she reported 90% improvement.

We now have fat lipolysis for the flanks and abdomen. This technology is effective for reducing the waistline by 4 to 6 inches after 2 to 4 treatments. The office staff needs to monitor the long treatment sessions, but laser lipolysis is an effective alternative for patients who do not wish to have liposuction. The device has specific handpieces that are not sized well for some areas such as above the knees and the upper arms. We will look forward to those upgrades in the future.

A plethora of devices for skin tightening also are available. Pelleve (Ellman International, Inc), the Ulthera System (Ulthera, Inc), and Thermage (Solta Medical, Inc) are options; each device has its own niche. I use Pelleve for a series of 4 to 5 twenty-minute treatments for tightening of the eyelids, face, and neck. My patients typically are satisfied with the results and call it a warm massage. I also have many colleagues who recommend Thermage twice per year for maximum success, especially on the jowls and neck and also the abdomen. I love to combine 3 Fraxel re:store treatments and 1 Thermage treatment for postpregnancy tightening. Some leading dermatologists recommend using reduced tip pulses (compared with the 900 pulses that are recommended) for a faster, more affordable treatment. Look for fractional radiofrequency devices that are available now; we will see what they may offer compared with the full-face treatments.

We have seen many advancements in laser and light technology that have strengthened the treatment options dermatologists can offer to patients, including the use of a combination of devices in one session. Please enjoy this month's issue to learn how to optimize laser and light devices in your practice. ■

*From Mount Sinai Medical Center, New York, New York.
The author reports no conflicts of interest in relation to this article.*



Quick Poll Question

Do you use fractional CO₂ lasers in your office?

- ☐ Yes
- ☐ No

Go to www.cosderm.com to answer our Quick Poll Question