Fractional lasers

Retinoids, varying wavelengths optimize results

Quick Read

While fractional lasers appear to be exciting some of the best results currently in treating signs of aging in the skin and include the outcome associated with the procedures, work is continuing on ways to optimize the results that can be obtained by varying wavelengths and depths as well as combining the laser treatments with retinoids to provide doctors better answers for their patients.

By Karen Naga

Sacramento, Calif. — In the continuing hunt for methods to better repair the aging appearance of the skin, fractional lasers are offering promising results, especially when used in conjunction with retinoids, say Emil A. Tanghetti, M.D., F.A.A.D., Sacramento, Calif.

Dr. Tanghetti says that cosmetic dermatologists are looking at new ways to treat the skin, and in the treatment, the opportunity to use the opportunity to repair and rejuvenate.

"The advantage of the fractional-type devices is that they can reduce the skin a way that is not as ablative, and which allows much less downtime associated with the treatments," he says.

Before the development of the fractional lasers, Dr. Tanghetti says the CO2 laser was a primary laser of choice for anti-aging treatments. "The issues with the CO2 laser included longer downtime, and probably the most troubling, were side effects which included the potential for prematurely mottled pigmentation which is difficult to deal with. Researchers are trying to use the CO2 now in a fractional manner to see if those problems are mitigated. That data is still forthcoming; however, it's really premature to speculate." Research and testing are also continuing on the fractional lasers.

"We are still tweaking the fractional devices to optimize the results," says Dr. Tanghetti. "We are going deeper and using other wavelengths. For instance, we are doing a study right now using a fractional 1440, which is the Affirm (Cynergy) laser with Multiples, which means we put 1320 in there in a fractional way. "We are developing new ways to deliver the light and new wavelengths to use with it," he says.

Dr. Tanghetti, a clinical professor at the University of California, Davis, says current research brings a number of contributions to the table.

"For all of industry is developing the new, innovative technologies. Secondly, investigators and doctors in the field are working on finding new techniques and optimizing existing techniques. It's an interesting partnership," he says.

Add to that the pharmacological agents.

"It's nice to think that any one of them is going to be the Holy Grail in treating photaging. My guess is that the answer will include a little bit of everything." Dr. Tanghetti finds that using multiple wavelengths works well.

"We also have to optimize our cooling. That would be helpful. The cooling with all of these devices is critical, and physicians need to be very cognizant of that." Also, it's important to be aware of using different energy levels with different skin types. He recommends that doctors test the devices on a nonfacial area to determine where they are optimized and where problems occur, before using the device on a cosmetically sensitive area.

"We are still tweaking the fractional devices to optimize the results," he says.

Even though fractional machines may be similar in nature, each requires its own customization.

"What you cannot do is extrapolate from one device to another, because each is different. Every device would have guidelines, because they are all different — the wavelengths are different, the absorptivity for pigment and water are different, the depths of wounding are different, the cooling techniques are different; therein lie the variables, and putting those all together are specifics for the particular machine," he says.

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Dr. Tanghetti advises, "Go slow. Test. Be Cautious." He does not advocate trying to use all of the current devices, which include the Alium, the Fraxel (Rofin) and the Palomine.

"It's hard to work with every device, because they are expensive. You can't be a master of all unless you are willing to put a lot of expensive equipment in your office. Even then, the tendency will be to use one of them more than the other, because of a personal comfort level."

It's important for doctors to do their homework and look at peer-reviewed data, especially that which is presented at the American Society of Laser Medicine and Surgery. Dr. Tanghetti says that information will be presented in an unbiased manner.

"It's difficult to look at company materials and make a decision, because they have their own marketing interests," he says.