

ABG CLINICAL roundtable

Sciton's ProFractional Offers Dramatic Results and Quick Healing

By Lara G. Owens, Contributing Editor

With the new ProFractional® device, Sciton, Inc. (Palo Alto, Calif.), has developed a new way to improve wrinkles, scars and skin texture with results comparable to those of more ablative modalities, according to R. James Koch, M.D., a cosmetic plastic surgeon practicing in Palo Alto, Calif. ProFractional distributes laser energy deep into the dermis to cause collagen remodeling and stimulate new collagen production. "It's minimally ablative, so we don't disrupt the skin's surface. Through small holes we can reach depths appropriate for correcting wrinkles, texture problems and scars," he explained. "It's like using little depth charges to stimulate collagen production."

ProFractional's mechanism is like that of previous fractional devices in that it creates micro-thermal zones, but what sets it apart is the energy delivery. ProFractional facilitates precision depth and diameter micro wounds, without collateral uncontrolled heating. This stimulates fibroblasts to produce new collagen entirely within the zone of treatment, leading to quick healing times without discomfort. By varying density settings desired results can be obtained without the need for multiple treatment sessions. "You're not missing as many areas with each depth charge as you are with Fraxel® SR1500 laser (Reliant Technologies, Inc., Mountain View, Calif.), so there is no strict need for several treatments. Some patients may need four or five treatments, but you can see good results with fewer," Dr. Koch commented.

According to Dr. Koch, wound healing, and therefore downtime, is also significantly reduced with ProFractional treatment. The micro wounds are surrounded by healthy tissue, promoting a quicker response. "The CO₂ driven fractional devices cause too much thermal necrosis when heat is deposited. I prefer an Erbium:YAG driven device," he continued. "Patients love this device because they see results quickly and recovery time is short."

For physicians already using a Sciton laser, obtaining a ProFractional is an easy modular upgrade. The system therefore allows for quick and easy combination treatments. "ProFractional works well in combination with MicroLaserPeel™ (MLP). In fact, I don't think there's a better treatment for shallow acne scars," Dr. Koch noted.

Excitement about the new ProFractional device inspired a live roundtable webinar (web-based presentation) in which a panel of physicians discuss the ProFractional while others listen and ask questions. "The flexible informal structure of this type of forum allows experts to respond to each other's comments and relate their experiences," Dr. Koch explained. "It's a way for experts to gain helpful tips for use in their own practices and to familiarize the attendees with the technology."



R. James Koch, M.D.



Mark S. Nestor, M.D., Ph.D.



Jason N. Pozner, M.D.



Michael H. Gold, M.D.



B. Kent Remington, M.D.,
F.A.C.S., F.R.C.P.

Editor's Note: The following Clinical Roundtable was moderated by R. James Koch, M.D., a cosmetic plastic surgeon experienced in using the ProFractional. Dr. Koch and his colleagues share their knowledge and experience with this new treatment modality.

How do you select a fractional device that is right for your patients?

Mark S. Nestor, M.D., Ph.D.: For patients not concerned with downtime, I offer resurfacing with the Sciton Contour™. For those that can't afford as much downtime, I offer Fraxel, but it's painful and has a few days of redness and peeling. ProFractional offers improvement with minimal pain and downtime, and we've been using it for patients with perioral and periorbital rhytides.

Jason N. Pozner, M.D.: Lately, I've been focusing the ProFractional device on patients with severe acne scarring looking for better results with less downtime.

Michael H. Gold, M.D.: With the ProFractional device, I'm able to tailor treatments to each patient's needs and have one or two days downtime rather than four or five. Also, some don't want eight or ten treatments, which other devices require.

How do you compare ProFractional to the first device that appeared on the market?

B. Kent Remington, M.D., F.A.C.S., F.R.C.P.: If you have scars that are level 1 to 5, you can realistically aim for about 50% improvement, which I get with the ProFractional device. ProFractional is much easier to use than previous devices. You can easily adjust the settings, use more passes and you don't need to use sedatives.

Dr. Pozner: The ProFractional requires fewer treatments and no per unit cost to treat each patient. Many of us like to try things for our patients, and if there's a disposable cost every time it becomes a problem.

Dr. Gold: Sciton's ProFractional has depth and density settings that are easy to adjust. Patients aren't having significant downtime, even though we're providing erbium fractionated treatment. It ends up being a better treatment than the Fraxel, in my opinion.

What do you think is driving patient demand for fractional procedures as opposed to straight resurfacing or something like chemical peels?

Dr. Nestor: Clearly it's an issue of downtime. We are also seeing an increase in younger patients with less intense rhytides who want to take care of it early. Fractional procedures are ideal for these people because they don't need deep resurfacing and they can't afford the downtime.

Dr. Remington: Pain, downtime and no blue dye are at the top of my list. I didn't think the dye was much of an issue, but with acne scars it's more difficult to remove. It took two hours to get that dye off of one patient I had. Patient comfort and expense also drive the decision.

Dr. Gold: We all want Sciton resurfacing results. ProFractional resurfacing gets us closer to ablative results, but without the downtime, so everybody wins.

"I've used several different devices but with the ProFractional, I'm getting superb results without any discomfort and very little downtime."

Discuss the idea behind how ProFractional works with these zones of thermal necrosis.

Dr. Gold: Our depth is between 200 and 400 microns maximum, and some are even between 100 and 200 microns. We create damage, skip an area, damage and then skip in a pattern. Healing is much faster this way. It allows rapid re-epithelialization with less downtime.

Dr. Pozner: Our histology shows we can drill holes deeper than 800 microns with Sciton's new generation software. The spot size is 250 microns, and there's very little thermal damage at the rim. There may be an inherent difference if we create a cleaner wound that heals quickly because we don't have to expel that junk collagen.

Dr. Remington: To back that up, I've used a very even pattern with 250 micron holes. You have to hold it flush to the skin so it's focused and you can drill that clean little hole. You can line your pattern up well and see exactly where you've been. It's quick and easy for full faces.

Dr. Koch: We want to leave behind some damaged tissue, but not a lot. That's what stimulates a healing response, to lay down new collagen much like we did with the pulsed CO₂ laser. This way we get healing from all around the zone of thermal necrosis.

Dr. Nestor: With CO₂, there is much more peripheral damage as opposed to ablation with erbium. With the Fraxel you're getting significant tissue heating, but not necessarily ablation. All these differences make for different results.

What are your top five indications for your use of the ProFractional alone?

Dr. Pozner: I've been focusing on the worst of the worst with this device, so my top one, two, three and four are severe acne scarring. That's an area I wouldn't be able to treat well given just ablative technology. My number five would be simply trying to enhance results of ablative technologies, but with less downtime.

Dr. Remington: My number one would be all phases of acne scars in all skin types. Number two would be the more mature post-trauma scars that are lighter than the skin. Number three has been pigment dysfunction patients that have blotchy pigment where the faders, topicals and IPL devices have not been that successful.

Dr. Nestor: My number one indications are perioral and periorbital rhytides. I've used several different devices but with the ProFractional, I'm getting superb results without any discomfort and very little downtime.

Dr. Gold: We're basically doing skin rejuvenation, followed by acne scars and other traumatic scars. I'm using it on a lot of patients with pigment to try to get a series going and see where we can go with this. Fraxel can treat pigment, but I'm not convinced results will last.

Describe your level of patient satisfaction since using the ProFractional.

Dr. Pozner: The acne patients treated monthly are universally pleased with their improvements and



Before Tx



After two MLP and ProFractional treatments

Photos courtesy of Jason N. Pozner, M.D.

“I’ve been doing a lot of ProFractional for lines and wrinkles, and the patients have been thrilled, especially those who’ve had other procedures and can compare those results with what they see here.”



Photos courtesy of Michael Gold, M.D.

Before Tx



After ProFractional Tx

they can't wait to come back for their next treatment. That's the big difference from some of the other acne devices I've used.

Dr. Remington: Scars are difficult. Patient expectation is often far beyond what we can accomplish, but with ProFractional, patients are pleased with the radiance of their skin. We combine the ProFractional with fillers for atrophic scars and that combination has been great.

Dr. Nestor: I've been doing a lot of ProFractional for lines and wrinkles, and the patients have been thrilled, especially those who've had other procedures and can compare those results with what they see here.

Dr. Gold: For texture and tone, this has been great. People can get back into work quickly. And compared to other fractional devices, you're getting a bigger bang for your buck with the erbium technology. Patients love the concept.

What are your general treatment guidelines?

Dr. Pozner: We've been treating acne scar patients with a 5% lidocaine, 3.5% prilocaine base for 45 minutes and using a Zimmer chiller for adjunctive cooling. Patients tolerate significant depths very well. Post-operatively, acne scarring patients bleed the first day, so you have to warn them about that. By the second day, they look unbelievable.

Dr. Remington: We use a little microdermabrasion and double strength EMLA (AstraZeneca Pharmaceuticals LP, Wilmington, Del.) We often occlude with saran wrap for 15 minutes. Using topicals blanches the skin to help with pinpoint bleeding. We use a mist cooling spray periodically for 24 hours to cool their faces.

Dr. Nestor: It's really pretty simple to use a topical for 20 to 30 minutes and I've had no issue with pain control. They do have some pinpoint bleeding which stops very quickly, and the vast majority of my patients recover in a matter of hours. It's very tolerable.

Dr. Koch: I completely agree. In fact, most of my patients don't even take Tylenol afterwards. They say it's basically like a sunburn for a few hours.

Do you use a routine pre-medication or other topical, or medication afterwards?

Dr. Gold: If the patient has a history of herpes simplex I treat them for that a few days before and a few days after the procedure.

Dr. Pozner: This is controversial. It depends on what you're doing with your laser. If you're treating deep acne scars for which you go down 200 microns, it's in our best interest to get them on Valtrex.

Dr. Remington: I'm a big believer in using Valtrex for all my patients because it's easy for a patient's history to slip under our radar. If they know they're prone to outbreaks, I'll give them 500 mg and 250 mg if they don't have a history of herpes.

"It's pretty hard to find a device that gives you better improvement than ProFractional so far."

Can you describe your experience with patient discomfort afterwards, edema, erythema and overall downtime?

Dr. Pozner: I think it depends on the depth and the treatment area. Two passes and 10% of the surface area creates more downtime. So we tried to tailor this to be a one day healing procedure. The healing has been very fast with this device.

Dr. Nestor: It's obviously dependent on depth. For my standard treatment at 100 to 200 microns, pinkness can last up to a day. Some patients apply makeup that night and go out, but the key is that these patients can go to work the next day.

Dr. Gold: We did a 100 micron treatment on one of my employees with a little acne scarring. Immediately post treatment, she was a little pink but not bad by the end of the day. And the next day we let her put on her makeup and she looked fine.

How are you choosing a depth to treat these patients?

Dr. Pozner: We treated some patients with ProFractional alone a month apart at 150 microns and 5% surface area. These patients showed me that this technology has significant advantages. I can get more than 50% improvement, which is the best I've been able to get with any type of technology.

Dr. Remington: I'm doing something similar. I'll make a few more passes on areas more scarred and be a little more assertive in stacking those pulses. It's pretty hard to find a device that gives you better improvement than ProFractional so far.

Dr. Nestor: Typically I'm fairly superficial at 100 to 200 microns. I'll do a single pass with wonderful results for the acne scarring. For fine lines and wrinkles we tend to use a more significant depth.

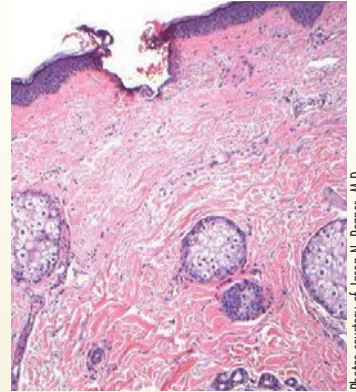
Dr. Gold: Anywhere from 20 to 50 microns is where we're staying right now to start.

The new generation ProFractional offers a larger treatment area and software that calculates the depth for the user. What types of patients and skin types have you been treating with this device?

Dr. Pozner: I haven't tried any type V or type VIs, but I think the potential of this device is tremendous. We can treat up to 60% of the skin's surface area and down to 1000 microns. Soon we'll be able to treat many different skin types while maintaining quick healing or very deep resurfacing with better results than we've seen before.

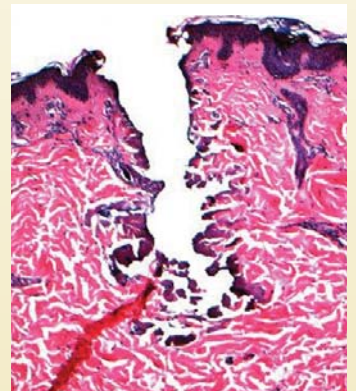
Dr. Remington: I've been using it for types II, III and IV. I have a lot of Asian patients in my area of Canada and we have not seen pigment changes. I don't pre-treat for acne scars because I don't think it makes a difference. You have a little post-inflammatory irritation but it hasn't been an issue.

Dr. Nestor: I'm in southern Florida and treat a lot of patients with different skin types. I've have had no issues with hyperpigmentation up to type V.



Photos courtesy of Jason N. Pozner, M.D.

ProFractional Variable Treatment Depth - 150 microns



ProFractional Variable Treatment Depth - 1,000 microns

“ProFractional can be purchased as a platform with different technologies and that’s been nice.”

Photos courtesy of B. Kent Remington, M.D., F.A.C.S., F.R.C.P



Acne scars before Tx



Acne scars four weeks after three ProFractional treatments

Dr. Gold: Mainly I’ve treated up to type IV skin. As Dr. Pozner said, I think you can push this machine. Certainly we’ll start applying it to types V and VI to see what it can do.

What is your current regimen as far as repeat treatments, and what’s your interval?

Dr. Pozner: Based on what we were doing with non-ablative technology, We’ve been treating a month apart.

Dr. Remington: We’re at four weeks and I don’t think that’s magical, but that’s also what we’re doing.

Dr. Nestor: I tend to do two to three weeks for lines and wrinkles. I’m not sure if there is any science behind the interval, but I wanted to initiate and stimulate collagen remodeling.

Dr. Gold: Four weeks is our golden rule because it’s more convenient for scheduling. I don’t disagree with what Dr. Nestor is saying. I think three weeks is fine, and if someone can’t come back for six weeks, that’s fine too.

Dr. Nestor noted that treatment typically takes about ten minutes, do you agree with his assessment?

Dr. Gold: That’s about right. When you actually get started with the treatment, it takes ten to 15 minutes at the most. When you start adding the hands and the neck and so forth, that adds a few minutes, but it’s not very long.

Dr. Pozner: For the MLP the speed is depth dependent as well. The new software is much quicker than before.

Have you combined the ProFractional with any other treatment?

Dr. Gold: ProFractional can be purchased as a platform with different technologies and that’s been nice. We’ll do an IPL treatment the same day and it makes the patient feel they’re getting more.

Dr. Nestor: No question about it. I combine with skin tightening, MLP and IPL. We can even use Botox and fillers at the same time as ProFractional. We’ve used just about everything, two or more procedures, same day and with phenomenal results.

Dr. Pozner: I’ve been doing an MLP first, then 10 to 20 microns with the ProFractional. The light peel removes the stratum corneum. Using ProFractional at the same time is something we should all be trying to see if we get better results.

Dr. Koch: I’ve combined ProFractional with MLP, like Dr. Pozner. I agree that the advantage of ProFractional is that it’s not a stand-alone device. It comes in a box that lets you do MLPs too, so you don’t need to have another laser.

"I change the handpiece to treat with ProFractional in areas that are more wrinkled, such as the glabella, in front of the ears around the tragus, and sometimes the eyelids and corners of the mouth."

When do you use ProFractional with MLP vs. ProFractional alone?

Dr. Gold: If the patient is looking for something ablative, we like MLP. I think the idea of combining it with ProFractional is great. We have not started doing this yet. For acne scars, I might use a peel in combination. I might actually do ProFractional on the full face then MLP on spot areas. In the next few weeks I'll be trying different techniques.

Dr. Pozner: The only problem with doing ProFractional and then MLP is that by drilling deeper holes in the patient, the patient will get a little wet which will reduce the efficacy of the peel. You might find it works better the other way around.

Dr. Nestor: The beauty of the MLP is the effect on pigment and mild rhytides. You can see the ProFractional augmenting these aspects of the MLP. I'll be using ProFractional without MLP in patients who don't want downtime.

Dr. Remington: They're a nice marriage. I do the full face MLP with one pass at anywhere between 20 to 50 microns. Then I change the handpiece to treat with ProFractional in areas that are more wrinkled, such as the glabella, in front of the ears around the tragus, and sometimes the eyelids and corners of the mouth.

Dr. Pozner: I like to do MLP first, especially with the Zimmer chiller. It gives a nice platform for the fractional treatment.

Dr. Koch: I strongly agree. Patients are already numb for the MLP, and going ahead with ProFractional adds another ten minutes. Downtime has been the same as with MLP alone.

Are your patients concerned with the cost to start with MLP and then treat with ProFractional? How do you charge for this?

Dr. Koch: I've actually been including it in my MLP package so I could get more experience with it.

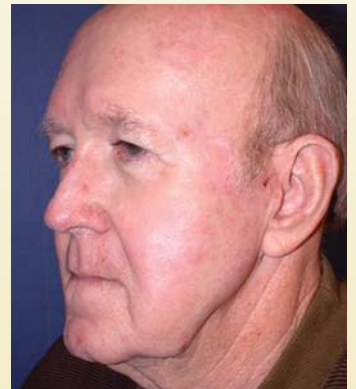
Dr. Nestor: I charge more when I do the combination. If the patient has a problem with that, we talk about the different options. I don't charge a lot for it, but we talk about it being two separate treatments together. Patients understand that.

Dr. Gold: We all have to remember that we're in different areas of the country and people can charge and afford different prices.

Dr. Remington: I plan ahead. I usually resurface the perioral area, lower eyelids and glabella, and use the MLP elsewhere to get one color and texture. Then I'll do the fractional laser on those areas. I charge one price, but I anticipate what the price will be before I start.



Before Tx



Three weeks after two ProFractional treatments

Photos courtesy of R. James Koch, M.D.

“ProFractional was thought out meticulously to maximize our treatments.”

Are you able to delegate ProFractional treatment to ancillary personnel?

Dr. Pozner: I was doing all the deep resurfacing myself, but the ProFractional handpiece simplifies things. I can get my nurse practitioner to do a 10 or 20 micron peel and then a ProFractional, and that frees me up to do other things.

Dr. Gold: My nurse practitioners are doing this too.

Any final thoughts on combination procedures?

Dr. Gold: We haven't talked a lot about skincare but the dermatologists and plastic surgeons will all tell you it's what we do everyday. If you're doing these kinds of procedures, you need good skincare.

Dr. Pozner: Just yesterday I removed some lesions with the laser, flipped it out to do some veins, then did some broadband light SkinTyte (Sciton, Inc.) treatment, all within just a couple of minutes. That's the advantage over the other systems. The lack of a disposable cost is a huge advantage. We have a competing skin tightening device that costs 30 cents a shot, and we haven't turned that on in six months!

Any other comments?

Dr. Gold: Know the company making your laser. Sciton machines are state-of-the-art. ProFractional was thought out meticulously to maximize our treatments.

If you want to do hair and veins and other things, you have a whole spectrum here that not a lot of devices, let alone fractional devices have. If you want to upgrade or add parts, it's important to know they're available. This system gives you that opportunity.

Dr. Koch: I agree. I think it's the best technology out there.

Dr. Nestor: You certainly don't need to use an occlusive dressing and you don't even necessarily need to use Aquaphor to achieve optimized healing. You can use a mild emollient or a spray. As Dr. Remington mentioned before, this is not something that requires a lot of topicals post-procedure.

Would you hesitate to use isotretinoin?

Dr. Nestor: Accutane changes the wound healing response. It doesn't mean you'll necessarily get scarring three months after Accutane, but you may not get the response you're looking for. If you are doing a procedure that involves remodeling, wait at least six months after Accutane.

Can ProFractional be used on places other than the face?

Dr. Nestor: I've used it on a few hands and chests, and found no problem.

Dr. Pozner: We've been playing with some stretch marks, but it's a little too early to see results.

Dr. Gold: I've used it on my hands, so I'll let you know when I get the pictures.



Before Tx

Photos courtesy of R. James Koch, M.D.



Five weeks after MLP and ProFractional Tx