

So, You Want to Get Started with Lasers?

Pearls on how to incorporate them into your practice



By Warren B. Seiler III, MD

ne of the most common questions that other physicians ask me is how to begin to use lasers in their practice. It can seem exciting, yet daunting, to bring in a new procedure that centers on a device.

The exciting part? Acquiring new devices means expanding your aesthetic services. The daunting part is the level of knowledge and training required to properly treat patients and produce excellent results. Many times, physicians have limited time for further training once a busy practice has been established.

In addition, lasers are expensive, and most surgeons are not used to having to purchase expensive equipment beyond the initial investment in supplies to start a surgical practice. That being said, laser procedures can help you offer a much wider range of treatments that will benefit both the patient who has had surgery and the one who is not yet ready for surgery.

I tell physicians and patients that laser procedures can be "insurance for your surgical procedure" in many ways. Laser procedures can help add to the result of surgical tightening by treating dyschromia, discoloration, texture, pore size, vascular lesions, and providing overall better skin health and appearance.

You can pull the skin tighter with surgery, but the skin often needs surface treatment with laser procedures. Don't just focus on achieving tighter skin; focus on overall better-looking skin, also.

This may sound like a sales pitch, but you will hear me often say, "Don't put

Talking Points

- Don't take on too many lasers and not properly learn what you need to know about each one.
- Start with one or two devices and master them.
- Get proper training (weekend training sessions are not enough).
- Learn the theory and physics of lasers in general and of each device.
- Take your time in choosing a laser after a lot of research, asking questions, and demonstrations. Ask someone you trust who has experience with the device you are considering.
- All non-physician practitioners using energy-based devices require proper training.

cheap tires on a Rolls-Royce." Surgical results will greatly benefit from follow-up, "maintenance" laser procedures, and good medical skin care.

Finally, a laser procedure can often help you treat a patient who does not really need surgery yet, so that you don't have to refer the patient elsewhere.

TRAINING IS PARAMOUNT

My advice always starts with telling fellow surgeons that they need to obtain proper training in the type of laser they are going to incorporate into their practice.

Understanding the theory and physics, and differences, of each laser device is the key to fully utilizing the device in treating patients, not just in safety measures but also in achieving great results (remembering that you can undertreat just as much as you can overtreat).

Although I unfortunately see burns and other complications in patients who come to me from other practices, it is much more common for me to see a patient who has a treatment somewhere else who is unhappy because they were "undertreated" or treated with the wrong device. Commonly, this occurs when a physician delegates a "lesser laser" procedure to someone who is not properly trained.

Commonly, I've seen many patients who have had laser hair removal and treatments with intense pulsed light (IPL)-based devices and were unhappy about the result. A thorough consultation, informed consent, expectation discussion, and proper patient selection are always necessary for success.

PATHS TO FOLLOW

There are basically two ways for you to begin to incorporate lasers: "top down" or "bottom up."

Top down—your first laser is one that provides the highest-grade result for skin tightening that a laser can provide. The

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Seiler and a portion of his collection of laser- and energy-based devices.

"top" is actually a reference to the quality of the surgical result that can be achieved by a laser. In my opinion, the top laser is a CO₂ resurfacing laser.

As your laser practice grows, you can begin to incorporate other lasers "down" from the CO₂ laser, including fractional lasers (both ablative and nonablative), IPL, vascular lasers, and laser hair-removal lasers.

There are also alternatives that rely on new technologies to tighten skin. For example, Solta Medical Inc's Thermage is a noninvasive radiofrequency (RF) procedure for tightening and contouring skin. Another more recent noninvasive skintightening device is Ulthera, from the firm of the same name—a procedure that uses micro-focused ultrasound instead of traditional light or RF energy-based approaches. There are many more examples of products that make up the energybased device universe, the enumeration of which is beyond the scope of this article (see "Laser- and Energy-Based Devices Snapshot," page 21).

In practice, you first add what complements your surgery the most—you already know that my favorite is fractional CO₂—and then adds other as the needs arise. This is the best way to develop a laser

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practice, but it necessitates a lot of handson involvement.

Bottom up—you start with a more common and simpler procedure, such as laser hair removal. Delegating this procedure to a non-physician can be done carefully with proper training of the practitioner, as well as your proper continued involvement (after you are well-trained and individually comfortable with all aspects of the laser procedure).

As your laser business develops, you can comfortably purchase other devices as the patient population begins asking for procedures that demand a wider variety. If you've ever read my material or heard me train or lecture, then you have heard me

warn you against becoming the "jack of all trades, master of none." So, be careful to master each procedure before spreading you or your staff too thin.

THAT LITTLE THING CALLED TRAINING

How do you get trained in lasers? Ideally, you received proper training as a resident and were exposed to a wide range and number of procedures.

Residency programs like dermatology and plastic surgery are increasing requirements for cosmetic laser procedures, but the majority of physicians reading this may not have had much experience with lasers as a resident.

Regardless, you must become familiar with what each laser can and cannot treat, the range of treatment parameters, the risks and complications, and what type of patient will benefit from a procedure.

Typical "weekend courses" are very expensive and usually cover only the basics of different procedures (and are often "company specific," so that you would need further training if you bought another brand of the same type of laser). These courses are useful for the beginner without much experience.

If you find it hard to believe that it can really do what it says it can do, it probably cannot.

After you learn the basics of theory and physics, and obtain specific laser training, you usually can begin to conservatively treat staff members, family, friends, and trusted patients. A lot can be learned from conservative treatments that become more aggressive with comfort.

You must properly disclose to those you treat about the complication risk. In particular, the chance of undertreatment will allow you to carefully treat. Via experience and additional education and training, you can learn how to treat more aggressively. Once you have performed a number of basic treatments, then you can obtain further training at a practice like mine, in which you can spend a few days getting advanced training. Practice makes perfect.

SHOW ME THE SCIENCE

Another great question is how to choose a laser in a certain category of procedures. It is overwhelming even for someone with experience to consider all of the different companies that make a laser that treats the same condition.

Several firms offer procedures like laser hair removal, IPL, or fractional CO_2 . I am a practitioner, not a "techie," but I know my laser physics and theory. When I consider a new device, I want to be shown the science. Any sales rep that calls on me will be met with that first question: "Will you show me the science?"

Don't let fast-talking salespeople present you with a list of procedures and pictures and just get away with saying, "But it really works." You need to find out why it works and how well it works. Do your homework.

The most common mistake practitioners make is in buying the wrong device. You will rarely find a "cheaper laser" that does what its more expensive competitor does. You get what you pay for. You need to research a number of different options and companies, discuss with trusted colleagues, understand the device and conditions it treats, and try it before you buy it.

Typically, I will research a device for months, let others try it first and publish studies, demo it, and wait for results before even considering cost and purchase. I personally offer training services, so please feel free to contact me for more information.

Knowing what each laser can and cannot treat is also very important. There's a saying: "If all you have is a hammer, then everything looks like a nail." This is true for any energy-based device, as well, especially those with a wide range of conditions that are FDA-approved for the laser to treat.

Usually, each condition is only best treated with one or two devices. Practitioners will invite complications if they try it for something else—to see if it works. Although this philosophy can cause complications, it more often simply leads to an unhappy patient.

Stick to what you know the laser can do. You can feel free to borrow that line and use it like a mantra when you consider buying a device. If you find it hard to believe that it can really do what it says it can do, it probably cannot—no matter what you think the before-and-after pictures show.







Left to right: HydraFacial/LED, Thermage CPT, Fraxel Dual, Lumenis Encore CO₂, Lumenis One IPL/ND:YAG (in back corner); and in front, the Clear & Brilliant Laser. The author has two more lasers, but couldn't fit them all in one photo.

DELEGATION

Physicians will often delegate laser procedures to non-physician practitioners. If done correctly, this can be very financially beneficial to the practice and very cosmetically beneficial to the patient.

You must always know your state medical board's policy regarding delegation, and you can find this information on the state board's Web site or via a simple phone call.

Prior to delegating, become very comfortable with the procedure yourself and build a history of achieving great results. Then have the practitioner spend ample time observing you perform the procedure and, eventually, you observing them perform.

Here is the most important thing to remember for success: Practitioners must be able to perform the procedure just as well as you, which can be achieved by the well-qualified practitioner acting under you—if you stay involved.

In any case, you should always see the patient for the initial consult and consent. And I also believe that it works best if you do the initial consult with the practitioner along with you. If this is not possible (in

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some practices, this may be difficult), then it can be done efficiently by having the practitioner who will be performing the procedure do the bulk of the consult and you can give a "final blessing" and consent.

However, it works best if you can also see the patient each time a treatment is to be performed, so that past treatment and result and future settings can be discussed.

MEDICAL SKIN CARE

As I have trained many physicians, I am always concerned if a practice is beginning to use lasers without including a good medical skin care line.

Too often, I see a very well-trained

surgeon begin performing laser procedures without also focusing on skin care. You never want to perform a laser procedure and then put the patient on non-medical-grade, over-the-counter junk.

Pre- and postprocedure skin care is extremely important. Aestheticians or a skin care consultant staff member can be key in that they will be able to help you train the patient in using the proper skin care.

Each of my laser procedures has a very detailed required skin care regimen for before and after the procedure. Although I know the skin care lines I carry, having another specialist to separately assist the patient is ideal. Although you will direct the product selection, you will save a lot of time if your skin care specialist sets up the patient's full skin care plan.

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Laser- and Energy-Based Devices Snapshot

A sampling of manufacturers, derived from PSP's April 2011 Buyer's Guide

Alma Lasers Inc

485 Half Day Rd, Suite 100 Buffalo Grove, IL 60089 (561) 369-1244 Fax: (224) 377-2050 www.almalasers.com Alma Lasers is a global developer, manufacturer, and seller of lasers and other light-based and radiofrequency devices for aesthetic and medical applications.

Altair Instruments Inc

330 N Wood Rd, Suite J Camarillo, CA 93010 (805) 388-8503 Fax: (805) 388-9503 www.diamondtome.com Altair manufactures the DiamondTome Skin Resurfacing System.

Candela Corp

530 Boston Post Rd Wayland, MA 01778 (800) 733-8550 Fax: (508) 358-5602 www.candelalaser.com Candela Corp is a pioneer in the development and commercialization of advanced aesthetic laser

development and commercialization of advanced aesthetic laser systems that allow physicians and personal care practitioners to treat a wide variety of cosmetic and medical conditions, including the treatment of unwanted hair, wrinkles, acne, acne scars, vascular and pigmented lesions, skin tightening, tattoos, and skin rejuvenation.

CoolTouch Inc

9085 Foothills Blvd Roseville, CA 95747 (877) 858-2665 Fax: (916) 677-1901 www.cooltouch.com

A leading US-based developer and manufacturer of innovative, advanced laser products for medical professionals; and considered a pioneer in the medical and aesthetics technology industry.

Cutera Inc

3240 Bayshore Blvd Brisbane, CA 94005 (888) 428-8372 Fax: (415) 330-2444 www.cutera.com Cutera was established in 1998 to develop, manufacture, market, and sell laser- and light-based medical devices.

Cynosure Inc

5 Carlisle Rd Westford, MA 01886 (800) 886-2966 Fax: (978) 256-6556 www.cynosure.com

Cynosure develops and markets aesthetic treatment devices that are used by physicians to perform noninvasive and minimally invasive procedures to remove hair, treat vascular and pigmented lesions, rejuvenate the skin, liquefy and remove unwanted fat via laser lipolysis, and temporarily reduce the appearance of cellulite.

Erchonia Medical

4751 E Indigo St Mesa, AZ 85205 (888) 242-0571 Fax: (480) 981-1652 www.erchonia.com

A world leader in low-level Lasers, with two FDA 510(k) market clearances: the first for laser-assisted liposuction and the second for the treatment of acne.

Fotona Lasers

1415 First St S, Suite 5
Willmar, MN 56201
(888) 550-4113
Fax: (320) 235-4000
www.fotonamedicallasers.com
Fotona presents the highest-performance laser systems in the world. Unmatched speed, power, and technology provide the widest range of treatment options available.

Iridex Corp

1212 Terra Bella Ave Mountain View, CA 94043 (800) 388-4747 Fax: (650) 962-0486 www.iridex.com Iridex manufactures the Gemini (532 nm KTP / 1064 nm Nd: YAG), VariLite (532 nm KTP / 940 nm Diode), and Venus-i (2940 nm Erbium) laser systems.

Lumenis

2400 Condensa St

Santa Clara, CA 95051 (877) 586-3647 Fax: (800) 505-1133 www.aesthetic.lumenis.com Lumenis pioneered the revolutionary Lumenis One multitechnology platform, the IPL Quantum multiapplication system, and the gold-standard LightSheer diode laser system for hair removal.

Lutronic Inc

51 Everett Dr, Unit A-50 Princeton Junction, NJ 08550 (888) 588-7644 www.lutronic.com

Lutronic is acknowledged as a global leader and premier innovator in the development and manufacturing of medical lasers

vator in the development and manufacturing of medical lasers for physicians, dentists, and aesthetic clinicians worldwide.

Novalis Medical LLC

813 S Westshore Blvd Tampa, FL 33609 (866) 627-4475 Fax: (813) 849-6364 www.novalismedical.com Manufacturer and distributor of advanced intense pulsedlight devices used in medical aesthetics.

Osvris Medical USA

3330 Earhart Dr, Suite 208
Carrollton, TX 75006
(800) 787-4417
Fax: (972) 720-0427
www.osyrismedicalusa.com
Osyris Medical USA is the
American extension of the international leading medical laser
company, Osyris Medical.

Palomar Medical Technologies Inc

82 Cambridge St Burlington, MA 01803 (800) 725-6627 Fax: (781) 993-2330 www.palomarmedical.com Manufacturer of advanced laser and pulsed-light systems for aesthetic applications, such as permanent hair reduction, fractional soft-tissue coagulation and skin resurfacing, photofacials for pigmented and vascular lesion removal, fractional skin tightening through soft-tissue coagulation, leg veins, and acne.

Sciton Inc

925 Commercial St Palo Alto, CA 94303 (888) 646-6999 Fax: (650) 493-9146 www.sciton.com

Sciton Inc is a privately owned medical device company formed in 1997 to provide advanced lasers and light sources to the aesthetic medical markets.

Solta Medical

25881 Industrial Blvd Hayward, CA 94545 (877) 782-2286 www.solta.com

Solta Medical offers products to address aging skin under the industry's two premier brands: Thermage and Fraxel.

Syneron Medical Ltd

111 Granton Dr, Unit 110 Richmond Hill, ON L4B 1L5 Canada (866) 259-6661 Fax: 905-886-7046 www.syneron.com

Syneron Medical manufactures and sells nonablative medical aesthetic devices that use the patented elos technology, which combines bipolar-radiofrequency and light energies.

Viora Inc

30 Montgomery St, Suite 660 Jersey City, NJ 07302 (877) 384-8032 Fax: (201) 332-4100 www.vioramed.com Viora is a market-leading manufac-

Viora is a market-leading manufacturer of advanced radiofrequency, light-based systems and Diamond Tip microdermabrasion for the global aesthetic and medical markets.