Syneron Candela recently hosted an Aesthetic Clinical Experts (ACE) Symposium at the Mandarin Oriental Hotel in New York City. ACE brings together health care professionals interested in learning the latest in energy-based aesthetic treatments. Device experts present clinical data and their personal experiences with products, ranging from hair removal treatments to treatment of acne scarring and vascular aesthetic needs. Experts offered pearls and insights on how they incorporate many of Syneron Candela’s devices into their practices.
HOW TO DECODE THE PICOSECOND PUZZLE

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Picosecond technology is changing the way dermatologists address tattoo removal as well as the treatment of benign pigmented lesions, wrinkles, and acne scars in new and exciting ways. Picosecond-domain lasers primarily exert a photoacoustic effect, which is qualitatively different than what is seen with earlier generation nanosecond lasers. There are several picosecond-domain lasers on the market and more in the pipeline, but Syneron Candela’s PicoWay stands out, because it offers high peak power and the shortest pulse durations available of all picosecond devices on the market. This allows for a photoacoustic effect that translates into greater comfort during treatment. With PicoWay energies, the shorter pulse duration also means pigment particles are broken down into smaller particles, resulting in faster clearance.

PicoWay has three true picosecond wavelengths: 532nm, 785nm, and 1064nm. When using PicoWay for tattoo removal, the dual wavelength (532nm and 1064nm) Zoom handpiece is the primary tool. Black is the most prevalent color in tattoos, and the 1064nm wavelength is ideal for treating black ink. I start with the largest spot sizes and then adjust down. The next most common tattoo color is red, which is best treated by the 532nm wavelength using the same Zoom handpiece. Yellow ink, previously unremovable, is now also easily removable with the picosecond-domain 532nm wavelength. Blues and greens are optimally treated with a more recently introduced third wavelength—785nm.

In my experience, I see better clearance of colors, especially blues and greens, relative to Q-switch lasers.

An important factor in outcomes is the interval between treatments. In my experience, I have found that the longer one waits between treatments, the more clearance and greater response one sees. Since tattoo ink is aggregated pigment within the dermis, you need to give those cells time between treatments to re-aggregate the particles you are breaking up.

PicoWay Resolve is used for treatment of acne scars and wrinkles. There are two PicoWay Resolve handpieces—a 532nm and a 1064nm—both of which split the beam into 101 identical beams. This provides a gentle treatment with low to no downtime, as it works below the surface to transform skin in acne scars and wrinkles. The treatment is tolerable, with eight to 36 hours of mild erythema, slight post-procedure discomfort, and minimal downtime. In fact, makeup can be applied the next day.

The PicoWay is increasingly a go-to for acne scar treatment in my practice. In an acne scar study that looked at 36 facial areas in 36 male and female subjects, 94 percent of treated areas improved.

The PicoWay® Zoom 532nm or 1064nm has also changed the way we treat benign pigmented lesions. Studies show 96 percent of treated pigmented lesions had at least 50 percent clearance (Grade 3-5) after two treatments or after four treatments (melasma lesions) by blinded evaluation. The clearance grade of benign pigmented lesions was assessed on a 5-point scale.

Other considerations are that PicoWay has a fast warm-up time, calibrates easily, and is quiet. There is no frequent costly flash lamp replacement, nor dye kits to replace, or consumables. Moreover, it is available in different configurations that can be upgradeable for future customization and software updates.

1. Based on available 510(k) summaries as of October 2017.

VASCULAR TREATMENTS IN MY PRACTICE

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The Vbeam Laser System is a flash lamp-excited pulsed dye laser indicated for dermatologic applications. It delivers pulsed laser energy at a wavelength of 595nm and is absorbed by oxyhemoglobin in the blood vessels rather than by the surrounding tissue. The Vbeam Laser System was the first laser to utilize the concept of selective photothermolysis, and its first application was for the treatment of port wine stains (PWS). It is also FDA-cleared for vascular lesions, facial telangiectasias, and leg telangiectasias, although sclerotherapy remains the gold standard for the latter. Other indications include rosacea, hemangiomas, angiomomas, Poikiloderma of Civatte (chronic sun damage of the neck), and cutaneous lesions, such as warts.

I use the Vbeam several times a day, every day in my practice to treat erythema, whether it’s in the form of rosacea, angiomas, or capillary malformations. It’s also a go-to laser for scarring following skin surgery. We typically
When I inject someone with botulinum toxin or fillers, I can usually tell if they will bruise. In cases when I expect bruising, I ask the patients to come back the following day for treatment with Vbeam to reduce bruising.

I also treat a lot of patients with *acne vulgaris*. I find that the Vbeam, which is approved to treat acne, is helpful for active inflammatory acne lesions and those stubborn post-inflammatory erythematous macules as well.

The Vbeam laser offers a wide variety of treatment spot sizes. There’s a unique 3x10mm elliptical spot size that allows the operator to optimally treat linear vessels. There are 3, 5, 7, 10, and 12mm spot sizes for vascular lesions. I most commonly use the 10mm spot size. There’s also a compression handpiece with 7mm and 10mm spot sizes to treat benign pigmented lesions.

The Vbeam also offers a patented dynamic cooling device (DCD) that’s operator independent and fully integrated into the handpiece. This is ideal because it’s extremely important to cool the skin with precision before delivering pulses of laser in order to prevent burning and injury.

**PURPURIC AND SUB-PURPURIC OPTIONS**

The Vbeam laser provides either purpuric or sub-purpuric settings, offering the versatility needed to achieve the desired clinical outcome for the type of vascular lesion being treated. The Vbeam laser has variable pulse durations; the shortest is 0.45ms, which is a purpuric setting. The longest pulse is 40ms, which allows for a sub-purpuric response; this provides a slower and more gentle heating of the vessel.

In general, the shorter the pulse, the more destructive the energy becomes; conversely, the longer the pulse the more gently the energy is delivered. For example, if I’m treating a port wine stain, a congenital vascular malformation, or an angioma, it is essential to treat at purpuric settings, which will be far more effective. With these conditions, I’m often shortening the pulse width and increasing the energy for a more aggressive punch. Because these patients are highly motivated to be rid of their lesions, they are willing to accept purpura. As a general cutoff, if you’re treating with a pulse duration of 3ms or shorter, it will produce purpura. If treating an angioma initially with a 3ms pulse width and 8 joules of energy, and I’m not seeing it turn purpuric, I can either shorten the pulse width, increase the energy, or both. When I see purpura, that’s how I know the treatment will be effective. When purpura is associated with treatment of these conditions, it usually translates to a good clinical result. With purpura, patients may experience minimal to moderate discomfort, but I don’t find that the purpuric settings are noticeably more painful.

By contrast, sub-purpuric treatments use a pulse duration of 6ms or longer. When treating generalized erythema on the face, we’ll use a sub-purpuric setting and increase the pulse duration to more gently deliver energy that coagulates rather than ruptures the target.

The Vbeam has proven results for the treatment of rosacea. I often see a 50 percent reduction in rosacea severity following treatment. For rosacea, my standard parameters are a 10mm spot, 6ms pulse duration, and 8 joules of energy; I’ll titrate if necessary. When I’m treating rosacea around the nose, I treat sub-purpurically; patients will be pink for a few days and will likely require additional treatments.

When treating diffuse redness or rosacea, you will see a vascular spasm, which correlates with coagulation of those vessels. The vessel will look better right away but then rebounds and appears pink to red for a few days. I also explain to patients that these vessels come back over time, but it still makes sense to treat them. I tell my patients that they will look worse before they look better and that they will wake up red and slightly swollen. I tell them to wait a full month before evaluating their response. I usually see patients with rosacea back in a month and if necessary, will perform a second treatment. Otherwise, I’ll tell them to expect to be re-treated again in six months to a year. Depending on severity, I usually treat my rosacea patients once a year—maybe once every six months, and sometimes once every two years. If the vessels are not treated, they get worse with age but pulsed dye laser treatment can keep them in check.

We don’t numb topically for pulsed dye laser treatments, because topical anesthesia can be vasoconstrictive. The target should be very red when delivering energy in order to optimize absorption by oxyhemoglobin. It’s a quick treatment that takes only a few minutes to treat the whole face. We provide stress balls and then apply ice immediately after treatment. The Vbeam treatment may be uncomfortable for the patient, but it is quick and more effective without topical anesthetic.

The pulsed technology of the Vbeam has evolved. The classic PDL technology was four pulses with dissimilar distribution. Now with the Vbeam pulsed dye technology we can deliver eight micro-pulses of equal energy distribution. These eight exactly equal micro-pulses lead to uniform distribution across the pulse and yield more consistent treatment. This enables a higher purpura threshold, because the total energy is divided over those eight pulses.

The pulsed dye technology and 595nm wavelength of the Vbeam are ideal for vascular treatment; we know that the 595nm wavelength offers the optimal depth of penetration and hemoglobin absorption. This is important because too
much melanin absorption at the lower wavelengths can be a limiting factor in treating darker skin types. Additionally, too much hemoglobin absorption at the lower wavelengths only permits access to the superficial vessels without getting down to the deeper dermis where there is a lot of inflammation and erythema. Conversely, with longer wavelengths, there’s not enough hemoglobin absorption, so excess energy is needed to treat vessels, making the treatment less safe.

The Vbeam is our work horse. We use the Vbeam several times every single day in my practice to treat vascular lesions. It’s one of the most versatile lasers that we use. When residents who are going out into their own practice ask which laser they should purchase first, I often direct them to the Vbeam.

With future advances in Vbeam pulse dye technology, we can deliver higher energy with a larger spot size.

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**TEMPERATURE CONTROLLED RF MICRO-NEEDLING TREATMENT IN MY PLASTIC SURGERY PRACTICE**

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It is well documented that collagen levels decrease as we age. Moreover, our bodies stop producing elastin when we’re in our twenties. We’re not just losing volume, but we’re also losing firmness and elasticity. Temperature-controlled radio frequency (RF) micro-needling with Profound can help recreate our supply of elastin, as well as collagen and hyaluronic acid—the three essential building blocks of skin.

We’ve been using Profound for about one year, and it’s been a great success in our practice. Profound is used for both aesthetic applications and cellulite. Profound is a patented bi-polar, micro-needle RF energy delivery system with ergonomic, single-button handpieces. The device comprises an easy-to-learn user interface with intuitive guided preset treatment parameters and a color touchscreen console. It is the first temperature controlled RF micro-needling device to create all 3 skin fundamentals, i.e., elastin, collagen and hyaluronic acid. It provides real time impedance feedback from tissue, assuring precise, repeatable, optimal delivery of energy. Clinical studies have shown 100 percent response rates for wrinkles, elevated hyaluronic acid levels, and increased elastin, sparing adnexal structures and adipose tissues. Profound does not affect a patient’s ability to undergo other surgical and non-surgical procedures, should they wish to do so in the future.

Patient selection starts with an understanding of goals and reasonable expectation management. Typically, the patient knows something about the technology, through word of mouth, social media, online research, or YouTube.

It’s very important to emphasize that results will not be immediate; rather, they will appear gradually and continue to improve for three to six months after the single treatment.

Prophylactic antibiotics are often prescribed for the night before the procedure and 7 days post-procedure. Anesthesia options include short-acting lidocaine, epinephrine, nerve blocks, a multiport injector or fanning techniques. Topical anesthetic, such as EMLA, can be applied 15 minutes prior to local infiltration of tumescence solution for patient comfort.

There is little to no discomfort post-treatment, but there is definitely some downtime in the form of one to two weeks of swelling and bruising. I tell my patients that they’re not going walk out of the office with anything more than a lot of bruising and swelling, but that it will take five to seven days to abate.

The Profound system has two types of tips—a dermal tip and a subcutaneous tip. Both tips create fractionated zones of micro thermal injury, depending on the area being treated. The tips insert at either a 25-degree angle (dermal tip) with five bipolar micro-needle pairs or at a 75-degree angle (subcutaneous tip) with seven bipolar micro-needle pairs. The dermal option is for a shallower treatment 1–2mm into the dermal layer. The subcutaneous tip will go deeper into the subcutaneous layer, 2.9–5.8mm deep. Both tips create reversible and healable wounds to stimulate the largest volume of response. That volume of response is achieved through optimal and adequate denaturing of the collagen over a three second pulse at a very specific 67-degree Celsius temperature, which is consistently controlled through feedback. No other radio frequency micro-needling device has this type of real-time temperature-controlled delivery of energy.

I’m seeing true and proven results with Profound, superior to other non-surgical technologies.

I charge $4,000 to $4,500 for face treatment. Conversely, my facelift procedures with OR anesthesia in a state-licensed certified surgery center with an anesthesiologist present costs around $13,100. With Profound, we’ve made
The treatment duration they will endure, pain tolerance, many times the patient is willing to undergo treatment, and budget, as well as post-treatment activity and care. All of this information will help shape the decision on the device I recommend.

I match device and technology to trouble spots. For example, VelaShape III is my go-to for small areas or for cellulite, UltraShape Power or VelaShape III is for medium areas, UltraShape Power is for large areas.

**UltraShape Power.** UltraShape Power delivers focused ultrasound energy that can disrupt subcutaneous adipose tissue (SAT) to provide a non-invasive approach to achieve the desired aesthetic effect. UltraShape Power is indicated for non-invasive reduction in abdominal circumference and fat reduction in the flanks and thighs.

With UltraShape Power, ultrasound energy is delivered to tissue within a precise focal volume at a controlled depth. A mechanical non-thermal effect results in minimal temperature elevation of 0.8°C in treated tissue for a comfortable treatment experience. Participants in a recent clinical study rated pain as 0.7 on a scale of 0 (no pain) to 10.

UltraShape Power offers 25 percent more power than its predecessor, the UltraShape. It is also 64 percent lighter enabling easy portability between treatment rooms.

Fat cells are precisely targeted while blood vessels, nerves, and surrounding tissue remain unaffected. **This is the only ultrasound technology that spares surrounding tissue.** The freed triglycerides are then cleared from the local area, processed by the body’s natural physiological and metabolic pathways, and transported to the liver. Clinical studies demonstrate that there are no clinically significant changes in lipid profiles following treatment.

The average treatment time is approximately 30 minutes. Most patients receive three treatments, spaced two weeks apart, for optimal results. Patients in a clinical study averaged 2.5cm abdominal circumference reduction at the midline, with a maximum reduction of 10.5cm, at 12 weeks after three treatments.

There is a short learning curve for operators. I started in guided mode and quickly evolved to “Fly Mode.” The guided mode guides you through a treatment, presenting little dots to indicate where ultrasound energy should be delivered. Once the operator has mastered the treatment, he or she can switch to “Fly Mode,” where the operator can treat without guidance from the system. Fly Mode treatments are much faster.

In a study done within our practice, we performed three non-thermal focused UltraShape Power ultrasound treatments just on the abdomen, and we measured the fat thickness as well as abdominal circumference. We had follow-ups at four, eight, and 12 weeks. A total of 62 subjects participated in the multi-center study.

Participants were mostly middle-age, with 43 as the median age. The BMI was about 25, and participants weighed anywhere from about 110-215 lbs. Most of those...
treatment sessions were performed with a focal treatment zone of 8, which is fairly large. Fully 82 percent of the patients reported absolutely no pain, which is consistent with what we see in our office now. Patients experienced a little bit of mild erythema post-treatment, but most reported no adverse events.

Most patients, by week 12, lost about two centimeters in abdominal circumference.

Overall, in my experience, UltraShape Power is the most painless body contouring treatment in my office, and every patient in my study had some measurable results at 12 weeks. It is a customizable treatment and very cost-effective for larger body types.

VelaShape III. The VelaShape III system is indicated for temporary reduction in circumferences of the abdomen and thighs, as well as temporary reduction in the appearance of cellulite. Powered by elos technology, VelaShape III is a synergistic use of three different energies: Bi-Polar RF (radiofrequency), IR (infrared) and Mechanical tissue manipulation with pulsed vacuum.

Several applicators are available for use with the Velashape III system. The VContour applicator combines the RF energy and mechanical manipulation of vacuum and includes three covers for treating small, medium, and large areas. The VSmooth applicator combines IR and RF energy and mechanical manipulation via vacuum and rollers (massage). The VContour applicator is used for circumference reduction, while the VSmooth applicator is used for cellulite. Both applicators can be applied during treatment, such as using VSmooth for the lateral thighs and VContour without the rollers for the more sensitive inner thigh treatment area.

VelaShape III treatment takes about an hour. This is a time investment, but data show that you can, over time, change the circumference an average of 2.6 centimeters with a single session. VelaShape III has much higher power than VelaShape II. It provides treatment control feedback, so you know you’re at the right temperature, and it gives you a grid to follow. It keeps track of treatment time.

PATIENT EXPECTATIONS

Managing patient expectations is essential with body contouring. When I first have a consultation with a patient, I point out that none of the non-invasive options compare to the results achieved with liposuction. I don’t perform liposuction in my office, but liposuction remains the gold standard. That said, non-invasive technologies are trending up because they appeal to a wide range of people; they are easy, simple, and have far fewer side effects.

When it comes to body contouring, one size does not fit all, but we are able to treat most patients with UltraShape Power and VelaShape III. These devices offer a comfortable walk-in, walk-out treatment, which is what today’s body contouring patients are craving.

FRACTIONATED CO₂ RESURFACING
FOR THE AGING FACE

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The hallmarks of photoaged skin include wrinkles, elastosis, purpura, solar comedones, colloid milium, and telangiectasias. Dermal aging is due to degradation of collagen and intrinsic and extrinsic (solar) elastosis.

The CO₂RE fractional CO₂ resurfacing system uses a fractional CO₂ laser to treat acne scars, provide fractional skin resurfacing, and treat wrinkles. Scanned pulses are delivered non-sequentially, which prevents overlap/overheating. The smaller thermal injury areas yield shorter downtimes as only a small percentage (five to 40 percent) of tissue is ablated, resulting in fewer complications than with non-fractional CO₂. The remaining epithelium is undamaged and intact, which facilitates quicker healing and shorter downtime.

The mechanism allows for treatment of darker skin types, removal of the photodamaged skin layer, coagulation of microvasculature, collagen contracture, and neo-collagenesis.

The CO₂RE system consists of four different ablative treatment modes: Light, Mid, Deep, and Fusion for varying degrees of skin resurfacing.

When treating at the subcutis level and below, we see contraction, a reflation of fat compartments, and reduction in laxity of retaining ligaments. When we treat deeper levels of the skin, we need to be mindful of the epidermis and dermis. During fractional resurfacing, energy can be delivered in different patterns and at different depths of injury. Laser surgeons can combine superficial and deep treatments with CO₂RE fractional CO₂ resurfacing, providing physicians with greater control over treatment outcomes.

The amount of downtime can be controlled, based on patient preferences. If a patient wants to give up just three days, fine. If they want to give up five days, fine. We “personalize” downtime by adjusting the settings to what patients want. In so doing, we’re removing the photodam-
aged layer of skin—the epidermis—and the zone just below the dermis where most ultraviolet light hits.

The spot sizes have gotten smaller, which allows the operator to increase the number of fractional zones, so there is more non-ablated tissue to heal the ablated tissue. Scanners now available permit modification of the patterns and ring size.

The CO₂RE has a very small footprint which is handy for moving it from room to room. It doesn’t require a dedicated outlet, and it works well in tight spaces. The CO₂RE can be used in the cutting or incisional mode, without requiring a large operating room.

GETTING THE MOST OUT OF YOUR HAIR REMOVAL DEVICE

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First introduced in 1998, the Syneron Candela GentleLASE system is a versatile system that comprises a 755nm alexandrite laser with short 3ms pulse durations to optimally address the target, large spot size ranges (15-18mm) for speed of treatment, and a patented Dynamic Cooling Device™ (DCD) for patient comfort.

The device is very useful for permanent hair reduction in fair skin types. It is also cleared to treat a broad range of vascular lesions and benign pigmented lesions. Further, the 755nm GentleLASE is also now offered in a dual configuration within the GentleMaxPro, which incorporates a second, longer 1064nm Nd:YAG wavelength. This dual configuration further increases the versatility of the device, opening up greater possibility in terms of the range of patient skin types that can be treated, the types of lesions that can be treated, and the efficacy that can be achieved.

In addition to dual wavelengths, the GentleMaxPro offers variable pulse durations, which is important for the indications for which it’s being used, and a wide range of spot sizes. The standard delivery system offers spot sizes inclusive of 6, 8, 10, 12, 15 and 18mms, and the optional Large Spot delivery system provides 20mm, 22mm and 24mm spot sizes. Since hair removal often involves a large body surface area, having large spot sizes at your disposal is essential. In addition, there’s also a Specialty Delivery system for treatment of vascular and benign pigmented lesions. Fluence is adjustable, and the system is very easy and comfortable to use.

Another differentiating feature of the GentleMaxPro is the patented, software-controlled Dynamic Cooling Device (DCD) that provides a burst of cold spray that’s delivered immediately prior to the pulse, greatly enhancing patient comfort and skin protection. When targeting a vascular lesion or a hair follicle, it is essential to spare the epidermis by minimizing or eliminating any heating or damage. The cooling mechanism enables pulse delivery to the chromophore deep within the skin in a clinically proven and efficient manner. The DCD is completely operator independent and is fully integrated into the handpiece; importantly, it also scales with fluence to provide precise and consistent protection of the epidermis.

HAIR REMOVAL TREATMENTS

When treating for hair removal, nearly everyone wants 100 percent hair reduction in the areas being treated. Some patients will be satisfied with less, including those who suffer from Pseudofolliculitis barbae or have ingrown hairs. In general, it’s reasonable to expect up to 80 percent hair reduction after a series of treatments, and depending on the treated area, the number of treatments in that series varies quite widely. On the first visit, it’s imperative to explain to the patient that they’ll need multiple treatments. You’re going to achieve, at best, 20 percent reduction per treatment, per area. You may never get 100 percent, but you can definitely expect to get 80 percent. Areas that are very light in skin color and have very thick, dark, coarse hairs will respond better, and areas with fine hairs, or areas that are being stimulated to grow for hormonal reasons, such as the face, may have less predictable outcomes.

I typically allow four to six week intervals between appointments when treating the armpit and bikini areas and a little bit longer—approximately six weeks—for the face. For the trunk and the extremities, you can extend the duration between treatment intervals. This is because the hair must reenter the anagen growth phase to allow the efficacy desired.

Cleaning the skin before treatments is imperative. Never treat over makeup or any sort of external product. Even if a patient tells you that he or she has nothing on the skin, make sure that you clean the skin. If you use topical anesthesia, as we do almost invariably for hair removal, make sure that it is fully removed before administering the laser energy.

Treatment endpoints are perifollicular edema and erythema. When you see this, you know that you’re going to get a good result. Each individual hair follicle will appear red with a little bit of swelling around it. It can be itchy for patients, and some patients may even develop small hives, but reassure them that this is a good thing.

When you’re using the 1064nm wavelength to treat light hairs, you’re not going to see as much of a vibrant erythema-
TREATMENT PEARLS

Remember these pearls while treating.

- **FLUSH:** The distance gauge should be flat and in contact with the skin’s surface.
- **PERPENDICULAR:** The hand piece should always be at a 90° angle to the skin’s surface.
- **OVERLAP:** The pulses should be immediately adjacent to one another; think of the Olympic rings. You want to have about 20-30 percent overlap between adjacent pulses.

TREATING PIGMENTED AND VASCULAR LESIONS WITH THE 755NM ALEXANDRITE LASER

The 755nm wavelength can be used to treat benign epidermal pigmented lesions, which are caused by an abnormal production of melanin.

Specifically, lentigines can be treated with 755nm/18mm/3ms/20J/cm² parameters. Café au lait stains are very difficult to treat, but they can be addressed with parameters of 755nm/8mm/3ms/40 J/cm². However, always perform a test first.

For treatment of smaller lesions, a small spot size should be used. Adjust your spot size to the size of the lesion. If you’re treating fair-skinned individuals, the larger spot size will yield a very effective treatment.

For treating vascular lesions, the 755nm wavelength targets hemoglobin. For effective damage to occur, the entire vessel wall must receive sufficient heating. Don’t double pulse these lesions; energy is being administered with a longer pulse width and one should avoid layering the energy on top.

Both the 755nm and 1064nm wavelengths can be used to treat vascular lesions. Although this is not the classic vascular laser, it can very effectively treat these lesions. With the 755nm, you can treat facial vessels, leg veins, resistant hemangiomas or port wine stains, and sometimes thicker lesions. The 1064nm can treat diffuse redness, venous lakes and deeper leg veins.

Unlike other targets, vessels and hair follicles are non-uniform structures. In the case of the vessel, there’s blood within the vessel and the endothelial cells. Keep in mind that to get true obliteration of a vessel, you have to heat hemoglobin and achieve diffusion of the heat to the surrounding endothelial cells to achieve complete vascular pan-endothelial destruction. Only then will the vessel go away.

Limiting the pulse to shorter than the thermal relaxation time will limit injury to the adjacent structures and effectively reach the vascular target. A benefit of the GentleYag relative to other Nd:YAG lasers is that because of the DCD, you get really good visibility. You really want to see that tissue and target response; that makes utilizing this laser preferable to some other 1064nm lasers that might rely on contact cooling and gel, for example.

When treating facial telangiectasia, look for blanching; don’t stack pulses. You can use the 1.5mm spot size with extremely high fluence, 280-340 J/cm². Observe the effect and don’t rush the treatment. For resistant linear vessels on the nose, I almost always use pulsed dye laser, but if you have a resistant vessel, you can get really nice results with the GentleLase 755nm.

Endpoints for treating lesions include a “snap” while treating. The darker the lesion, the louder the “snap.” Ideally, you will see “frosting” of the lesion. The lesion will darken within 5-10 minutes after treatment and remain so until crusting resolves (5-14 days). (You’ll also hear a loud snap if there’s any residual makeup on the patient, and this is not desirable.)

Post-treatment care for pigmented lesions includes regular use of occlusive ointment until the crust falls off. Skin pinkening can persist for weeks as skin gradually returns to a normal color. Strict sun avoidance for several weeks pre- and post-treatment is critical. Daily use of a broad-spectrum sunscreen with an SPF 30 or higher is essential to avoid hyperpigmentation or lesion recurrence.