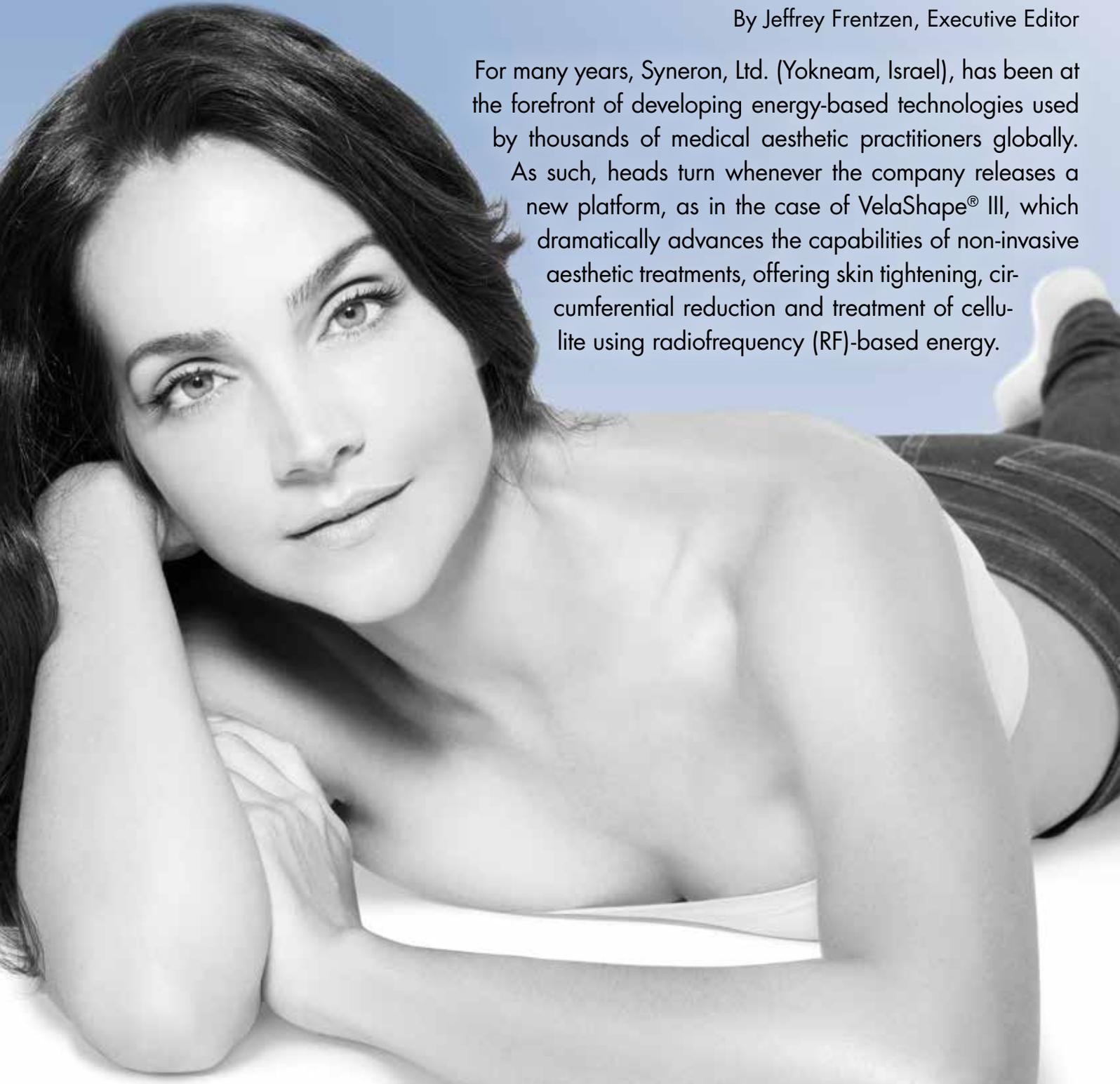


Syneron Raises the Bar in Energy-Based Body Shaping

By Jeffrey Frentzen, Executive Editor

For many years, Syneron, Ltd. (Yokneam, Israel), has been at the forefront of developing energy-based technologies used by thousands of medical aesthetic practitioners globally. As such, heads turn whenever the company releases a new platform, as in the case of VelaShape® III, which dramatically advances the capabilities of non-invasive aesthetic treatments, offering skin tightening, circumferential reduction and treatment of cellulite using radiofrequency (RF)-based energy.



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According to Alan Gold, M.D., a plastic surgeon in Great Neck, N.Y., “the launch of the VelaShape III marks another point in the evolution of the ‘Vela series,’ one of the most widely accepted, safe and successful non-invasive body shaping technologies for cellulite reduction.”

Data from Medical Insight’s newest Body Shaping and Skin Tightening market study shows that the number of installed energy-based skin tightening and body shaping systems is expected to see double-digit growth as physicians that do not already offer these non-invasive treatments purchase new, clinically validated devices. In addition, the overall trend in aesthetic medicine is toward safer, less invasive procedures with little or no downtime, even when efficacy is less than what can be achieved from riskier or more invasive alternatives. With this in mind the VelaShape III comes along at just the right time.

FDA cleared for abdominal and thigh circumferential reduction, the VelaShape III combines RF- and infrared-based energy with mechanical tissue manipulation via pulsed vacuum. Deep heat is delivered to fat cells and surrounding connective septae, as well as the underlying dermal collagen fibers. Higher heating levels of adipocytes is achieved by the system’s increased RF output, while the optimal electrode design with the concurrent application of vacuum allows for deeper heat penetration. “I use it for contour improvement and actual reduction in size of the treated areas, in addition to some improvement in the appearance of cellulite,” Dr. Gold advised.

As Todd Becker, M.D., Ph.D., a dermatologist and Mohs surgeon in Longmont, Colo., pointed out, “there are a number of ways to approach non-invasive or minimally invasive body contouring and fat removal. In general, many of the devices depend on heat energy, whether they are RF or ultrasound, to achieve the destruction of fat cells. Within that, RF can be either monopolar or bi-polar. What sets bi-polar RF apart is that you can very precisely control energy and hopefully you are able to

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effect changes on the skin and deep in the tissues. This is why VelaShape III has a great advantage over other systems."

The VelaShape III is based on Syneron's patented elōs® technology, which simultaneously provides dual heating of tissue via optical and RF energy and raises target temperature while maintaining epidermal protection. The highly controllable RF energy, combined with optical energy, allows practitioners to precisely target areas "preheated" by light energy.

During treatment, an increase in circulation and lymphatic drainage results in high tissue oxygen diffusion, with rising adipocyte temperature and oxygen concentration leading to a breakdown of the lipid droplets stored in fat cells. Furthermore, the increased lymphatic drainage induced by vacuum allows for better and faster clearance of degraded fat deposits.

"Tissue is drawn in via the vacuum-assisted applicator, then the bi-polar RF energy is delivered to that tissue," said Dr. Becker. "Drawing it up allows the RF energy to reach deeper than it normally would, which also enables me to control the process very precisely. As well, this is why we see decreasing volume in addition to skin tightening."

This synergistic use of different energies – bi-polar RF, infrared and the pulsed vacuum feature – is what differentiates the VelaShape III from the competition, Dr. Becker added.

Dr. Gold supported this sentiment, denoting that the synergy of optical and electrical energy facilitates more rapid and deeper heating of the tissue. "Compared to previous versions, the VelaShape III system works 40% faster. The RF energy has been intensified for faster and more dramatic results in a shorter time frame. As a result of an increase in cellular metabolism, stimulated fibroblast activity and a remodeling of the extracellular matrix, we have seen an overall improvement in skin structure and texture," he reported.



Before Tx



3 cm reduction after one VelaShape III Tx
Photos courtesy of Ruthie Amir, M.D.

“With its implementation of RF energy, you can focus on areas very precisely. I can do both body contouring based on fat removal and skin tightening, which is a unique feature.”



Before Tx



1.7 cm reduction after one VelaShape III Tx
Photos courtesy of Ruthie Amir, M.D.

Advanced technology and the mechanism of action are other distinguishing factors working in the VelaShape III's favor, Dr. Becker added. "For instance, in order to improve the appearance of cellulite and perform circumference reduction, the system must heat connective tissue to create a thermal tissue injury. This is based on the device's ability to reach an elevated and consistent "thermal dose" threshold for a specific duration. Reaching a precise temperature end point and maintaining it over time is a key element in achieving reliable clinical results," he said. "With the VelaShape III we can achieve the target temperature faster, therefore it is maintained longer, leading to better improvement in skin texture and increased volume reduction."

In addition, the stimulation of collagen formation, as well as a visible effect on the elastin fibers, has been well documented microscopically, Dr. Gold noted. "It appears that some of the effect is due to skin thickening and tightening, but there is more going on than just this. There appears to be some effect, although perhaps of shorter duration, on the superficial fat, along with the fibrous septa within the fat. It seems the combined effect produces the contour changes we see, both in measurement and in the appearance of cellulite; the overall 'quality' of the skin is improved."

For Dr. Becker, the VelaShape III became his device of choice after looking at and testing a number of body shaping and skin tightening platforms. "We had been using the VelaShape II, and while it worked well it took some time to heat up and maintain temperature. Also, I tried other systems that did not do a good job of letting me target specific body areas. None of them delivered the results that the VelaShape III can," he said. "With its implementation of RF energy, you can focus on areas very precisely. I can do both body contouring based on fat removal and skin tightening, which is a unique feature."

As a plastic surgeon Dr. Gold offers the full gamut of surgical procedures for body contouring. "Nonetheless, some patients are either unwilling or unable to have surgery. Many want an alternative approach

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without the downtime or risks associated with surgery, which led me to incorporate the VelaShape II about five years ago. The new VelaShape III offers an even further improved treatment package for those patients seeking non-surgical body shaping,” he said.

“I perform clinical research regularly for Syneron and had the opportunity to participate in the VelaShape III clinical trials. I presented that research before the FDA. I concluded that the VelaShape II is a great device, but the VelaShape III is even better,” Dr. Gold continued.

Lori Brightman, M.D., a cosmetic dermatologist in New York City, N.Y., agreed that the VelaShape III has expanded patient choices. “For a practitioner to be able to do the same amount of treatments better, and in a shorter period of time, the VelaShape III is ideal, especially when you’re talking multiple treatments on the same person,” she stated. “There are no issues with side effect profiles, either. When you’re looking at devices you want to see results that are reproducible, tolerable, safe and lead to patient satisfaction. The VelaShape III satisfied all of those criteria.”

In Dr. Gold’s opinion, the VelaShape III’s ability to deliver 150 Watts of power versus the 60 Watts available on the previous version is also a plus. “As well, it comes with redesigned and more ergonomic handpieces to focus the higher RF energy more quickly and effectively to the targeted area. The new real-time Smart RF skin impedance / temperature sensor allows this to be done even more consistently and safely.”

Dr. Brightman feels it’s also important to note that there are different ways of using the device’s higher power output to add more treatment options for the physician. “Prior to the VelaShape III, we were doing four to six treatments on the same body part once a week, which would take between 20 and 25 minutes. Now patients experience fewer and shorter sessions — typically, three treatments spaced two weeks apart with each treatment taking around 15 minutes. Or you can perform a single



Before Tx



3 cm reduction after one VelaShape III Tx
Photos courtesy of Ruthie Amir, M.D.

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Before Tx



2 cm reduction after one VelaShape III Tx
Photos courtesy of Ruthie Amir, M.D.

longer application,” she said. “Results can be seen as early as week two with best results seen after around eight to ten weeks.”

According to Dr. Becker, the company initially recommended two treatment protocols; one was an aggressive one-treatment protocol, versus three less aggressive sessions. “I thought, why not do the more aggressive treatment three times? This has been getting better results.”

This enhanced efficiency is due to the device’s increased power ability, Dr. Brightman reiterated. “Despite the increased power, treatments remain quite comfortable for the patient and the shortened treatment protocol is an added bonus. Another improvement is the availability of three tip sizes to target the neck, upper arms, tummy, thighs, buttocks and more.”

“Looking ahead the company has created a roller handpiece that is specifically designed to combat dimples and cellulite, which should be available in the next several weeks,” Dr. Brightman shared.

Along with these enhancements and increased patient satisfaction, Dr. Gold stated that while the VelaShape III offers practitioners exciting new options, patients must still be carefully educated on what to expect with non-invasive body shaping results. “No one wants to look ‘overdone’ or ‘over-operated,’” he noted. “And while some patients observe dramatic results and improvement in all desired parameters, some often erroneously and wishfully believe that non-invasive, energy-based treatments can produce the same results as surgery.”

“As long as realistic expectations are emphasized it is rare to have a patient unhappy with their improvement,” Dr. Gold maintained. “The inability to accurately predict who will respond best to all of our energy-based treatments is one of the most frustrating problems for physicians. Some patients have amazing results; most have very good results, and are certainly pleased. There are, however, some patients who see much less of a change and are disappointed. One of our greatest challenges is

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to more accurately identify who falls into which group and why, so that we can try to modify our technologies or treatment regimens to improve results for those patients.”

In general, when it comes to any cosmetic concern, “patients want less risk, less discomfort, less downtime and less cost,” Dr. Gold stressed, “but they also want more controllable and predictable results, more dramatic correction of their problems and longer lasting or permanent results. Non-surgical body shaping procedures do work well and I have found the VelaShape devices to be among the most effective, particularly the new VelaShape III.”

When asked about VelaShape III in comparison to other leading non-invasive body shaping technologies, Dr. Becker referenced some limitations he had experienced, specifically the lack of visible skin tightening effects. We began looking for something we could add that would give us the flexibility we wanted, namely to add skin tightening to the equation. That is what the VelaShape III gave us. It offers an effective skin tightening capability and the ability to treat areas that some other devices cannot.”

After a liposuction procedure, patients typically have loose skin, Dr. Becker continued. “With the VelaShape III we are seeing some great skin tightening afterward, which is what I find revolutionary about the system. With it we can change the characteristics and consistency of the underlying tissue and tighten the skin. We had not been able to tighten skin like this before. We have been trying out some pretty aggressive protocols and getting really nice results,” he said.

Dr. Gold also feels that the system is an ideal adjunct treatment post-surgery. “We often use it in conjunction with liposuction or abdominoplasty, in part because of its massage action, but primarily because of its improvement in skin quality,” he said.



Before Tx



2 cm reduction after one VelaShape III Tx
Photos courtesy of Ruthie Amir, M.D.

“The unit is cleared for temporary reduction of cellulite, but with the bi-polar RF I think there is a potential for long-term remodeling. The device is also very useful in combination with the bulk removal of fat.”



Before Tx



3 cm reduction to abdomen two weeks after one VelaShape III Tx
Photos courtesy of Syneron Candela

Combination treatments using different energy-based systems have become a foundation of Dr. Brightman’s practice. “Sometimes a patient is having trouble eliminating the fat in a certain area. Patients have tried diet and exercise, but still have not gotten a good result,” she noted. “Maybe there is a much more concentrated pocket of fat in the saddlebag area. I’ll use CoolSculpting from ZELTIQ Aesthetics, followed by a smoothing of the area and skin tightening using the VelaShape III. It’s a way to manipulate both devices to gain the best result for the patient.”

While investigating treatment modalities, Dr. Becker discovered a new use for the VelaShape III. “Until now I had not found a device that was satisfying for work on the arms,” he began, “with arms, often the issue is not fat. As women age they start to experience skin laxity on their arms and there isn’t any fat to remove. You need something that is energy-based that can actually tighten the skin, and I’ve seen excellent results using the VelaShape.”

Additionally, Dr. Becker has been trying VelaShape III treatments on other areas of the body. “On thighs we are seeing excellent results treating cellulite,” he noted. “The unit is cleared for temporary reduction of cellulite, but with the bi-polar RF I think there is a potential for long-term remodeling. The device is also very useful in combination with the bulk removal of fat.”

The VelaShape III offers practitioners superior non-surgical tools that can be used to appeal to the fastest growing patient segment, Dr. Brightman emphasized. “We’re talking about youth-aware people of all ages that demand excellent clinical outcomes with no surgery or pain and very little downtime.” ■