

# BTL Technologies Excel for Legs and Buttocks



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By Kevin A. Wilson, Contributing Editor

With its recent FDA clearance for circumferential reduction of the inner and outer thighs using the Flex applicator, Vanquish ME from BTL Aesthetics (Boston, Mass.) effectively addresses upper leg debulking, an important and underserved need in the aesthetic community, especially among women. Studies have shown reductions of up to one inch per thigh are possible, opening doors for those seeking untapped demand.

Industry trends are also suggesting a timely shift toward leg and buttock body shaping treatments. A 2012 poll by *FITNESS* magazine and Yahoo! Shine<sup>1</sup> revealed that only 14% of women are confident about showing off their legs; the thighs were the most hated body part for both men and women, followed by the arms and buttocks. Aesthetic leg concerns among women include thigh bulk and shape; saddlebags and inner thighs; banana rolls; butt lifting; and cellulite, among others.

According to dermatologist and cosmetic surgeon Suneel Chilukuri, M.D., medical director of Refresh Dermatology in Houston, Texas, the FDA clearance of the Flex applicator for BTL Vanquish ME adds one more tool to the company's well-rounded armamentarium. "What I find so remarkable about the Flex applicator is not just how dramatically it reduces thigh circumference, but how natural the contours of the results are," he said. "With other modalities for reshaping thighs you don't automatically obtain reductions that fit the proportions of that person, you have to carefully sculpt. With this device you can debulk and expect natural outcomes, then deal with localized problem areas and cellulite using technologies like BTL Exilis Ultra."

Dermatologist Annie Chiu, M.D., medical director of The Derm Institute (Redondo Beach, Calif.), agreed. "The natural looking, overall correction that the Flex applicator provides makes it stand out. Ideally, you'd use this first and then build on that result with other modalities better suited to more localized contouring. In fact, this quality of the BTL Vanquish ME makes it very well suited for use with virtually any other body shaping treatment."

Adding the BTL Cellutone acoustic wave device provides a dramatic enhancement, said Shelena Lalji, M.D. medical director of Dr. Shel Wellness & Medical Spa (Houston, Texas). "BTL Cellutone improves cell permeability and stimulates waste removal processes at the cellular level, as well as neovascularization and drainage. For each treatment zone you're using the device three to six minutes, maybe six to twelve minutes depending on the area," Dr. Shel expressed. "With the addition of a quick and tolerable procedure with no consumables, we get more rapid onset of the result and higher patient satisfaction – patients want to get other areas treated, they refer other patients, and you build long-term loyalty. BTL Cellutone is what pushes this over the top and gives you that 'wow' effect people are looking for."

Featuring contactless radiofrequency (RF), the BTL Vanquish ME reduces abdominal and flank circumference, and is also often used with BTL Cellutone. "Patients will typically start to see results after two or three sessions, with optimal outcomes observed after four to six treatments and continued results seen a few weeks following the final application," said cosmetic dermatologist Dendy Engleman, M.D., who practices at Manhattan Dermatology & Cosmetic Surgery (New York, N.Y.). "Results vary by patient, but on average patients see two to four inches in circumferential reduction across the abdomen area with BTL Vanquish ME plus BTL Cellutone. This represents enhanced patient outcomes, shorter treatment times and elimination of additional consumable

"BTL Vanquish ME is very well suited for use with virtually any other body shaping treatment."



41 year old female before Tx



One week after three weekly BTL Vanquish ME with Flex applicator, BTL Exilis Ultra and BTL Cellutone treatments  
Photos courtesy of Suneel Chilukuri, M.D.



Before Tx



After two BTL Vanquish ME treatments with the Flex applicator  
Photos courtesy of Shelena Lalji, M.D.

costs for the physician – a sharp contrast to similar systems which focus solely on smaller areas or specific fat deposits, making BTL Vanquish ME a more affordable option. Since there are no consumables we can bundle this with other procedures to entice patients to try new things.”

Harnessing non-invasive RF to induce apoptosis in adipocytes, the Flex applicator, like its big brother the Vanquish ME Core applicator, relies on differences in impedance between tissue types for selectivity in heating adipose tissue. As RF fields are generated and focused non-invasively, the greater resistance of fatty tissue leads to its more rapid heating while other local tissue remains relatively unaffected. Contactless infrared temperature readings are maintained between 40° C and 42° C, translating into subcutaneous tissue temperatures within the therapeutically active range that cause apoptosis in fat cells during each of four weekly, 30 minute (per leg) sessions, according to a study by Fritz and colleagues.<sup>2</sup> In this investigation, subjects (all women, n=42) undergoing therapy saw average circumferential reductions of almost 2.5 cm per leg at follow-up two weeks after the final application, with no reported pain during treatment or adverse events. Participants maintained their current lifestyle, without changes to diet, during the study period.

In another trial, McDaniel and Samková<sup>3</sup> treated 30 women (age range 32 to 59 years, average 42.4 years) in four weekly, 30 minute sessions with protocols similar to those of the Fritz study, showing statistically significant reductions in circumference at one month follow-up. Change in subject weight was not statistically significant.

An advantage to treatment with the Flex applicator is the comfort. Patients report feeling as if they are receiving a warm stone massage or hot bath, which helps maximize patient satisfaction, retention and word-of-mouth advertising. “At 30 minutes per leg, per session, with such a comfortable procedure, patients pass the time sleeping or watching movies. Before they know it we’re finished,” said Dr. Shel.

With the legs, weekly sessions improve the overall patient experience. “The tissue in the lateral thigh area tends to be more fibrous, so we get more hot spots,” said Grace Liu, M.D., a dermatologist in Newport Beach, Calif. “A weekly protocol keeps patients from experiencing too much tenderness. The addition of BTL Cellutone helps this as well.”

BTL Exilis Ultra is another powerful adjunct to leg reshaping. “The RF component of this system provides non-invasive thermal damage to depths of up to 2.5 cm, while the ultrasound improves comfort and decreases the time it takes to reach the target temperature (between 41° C and 45° C) to about one minute, in addition to enhancing the cellular processes involved in waste removal,” explained Dr. Liu. “It also features controlled cooling that allows us to treat different tissue layers, and intelligent impedance-based feedback control to maximize safety and therapeutic energy deposition.”

As part of the leg equation, treatment with BTL Exilis Ultra, combined with BTL Cellutone, add the finishing touches for tailoring the final result and dealing with cellulite. “Cellulite is a three-pronged problem, a combination of laxity, subcutaneous fat bulging and reduced elasticity in the fibrous septae, with variations depending on the individual. When you can address all three of these, you hit home runs,” said Dr. Chilukuri. “With BTL technologies we attack this problem from various non-surgical vectors with no pain or downtime.”

“If you have a larger patient you’d use the Flex applicator first to debulk the area. Notably, we tend to see better than expected skin retraction so there must be some

residual heat component," Dr. Chilukuri continued. "We then use BTL Cellutone to break up the fibrous bands, stimulate neovascularization and enhance lymphatic drainage. We can follow up with BTL Exilis Ultra to deal with specific areas such as above the knee, leaving legs with a natural and aesthetically pleasing shape rather than that tree trunk look. There are no step-offs or lines of demarcation, which unfortunately we have seen with other technologies, so we're improving on what nature gave us."

"There really hasn't been any good non-invasive treatments for cellulite," explained Jason Emer, M.D., a dermatologist at Spaulding Drive Plastic Surgery (Beverly Hills, Calif.). "BTL Exilis Ultra plus BTL Cellutone is the only treatment we've ever seen that non-invasively improves the appearance of cellulite for a significant amount of time. Other therapies, whether they are RF, ultrasound or massage, might give you improvement, but nothing sustainable without frequent, regular maintenance. Using the BTL combination we see outcomes that last from six months to a year. Patients either choose a more invasive solution and add BTL Exilis Ultra plus BTL Cellutone, or they do it alone once or twice a year and watch their lifestyle. Cellulite is mostly genetic and becomes worse with age so you'll always need treatment with something. Most patients choose the option that lasts, especially when it is non-invasive, comfortable and achieves great results."

Pop culture has heavily influenced a move in recent years toward an aesthetic focus on the thighs and butt. As Dr. Emer pointed out, "It's always been there, but we see more and more patients interested in procedures as awareness increases." According to a survey by Realself.com, the butt is the top area of the body that plastic surgeons expect more women to ask about than any other in 2016.<sup>4</sup> This mirrors statistics from the *American Society of Plastic Surgeons* showing butt lifts up 252% since 2000; butt augmentation with fat grafting up 28% from 2015, and both butt implants and butt lifts up 36% versus 2015.<sup>5</sup> "Treating the butt is definitely part of the overall leg picture and it should not be overlooked."

The age range of patients for leg and butt treatments is astounding, stated Dr. Chilukuri. "We regularly treat those in their early twenties to early seventies. As people are seeing what we can do, they are shockingly eager to open their pocketbooks. The results are excellent and non-surgical; this is what appeals to people. We've seen results that may approach or even equal those of surgery in some cases, but without the risk and hassle. Even minor surgery means taking time off from work, and for many this is not ideal."

Dr. Emer performs a procedure he calls a non-invasive butt lift using BTL technologies in conjunction. "By combining RF with ultrasound as part of this regimen, BTL Exilis Ultra allows the energy to be displaced at a greater depth," he explained. "Not only do you obtain superficial heating, which tightens, you achieve deeper collagen remodeling, which disrupts the tissue bands that contribute to the appearance of cellulite. When combined with BTL Cellutone, we also disrupt the adhesion of the connective tissue and improve lymphatic drainage as well, and the results are very dramatic. We're looking at improvement in the wavy, lumpy appearance of the skin, reduction in the dimpling and reduced laxity. When we add BTL Exilis Ultra more toward the top of the buttocks and really heat that area we see elevation in the upper lateral region. Women say they fill out clothing better and have a 'shape' to their butt when they might not have in the past."

"Typically you will see some immediate swelling and tightening, but you'll need between three and six sessions, spaced about one week apart," Dr. Emer continued. "After a course of treatments patients come in once a month for six months for



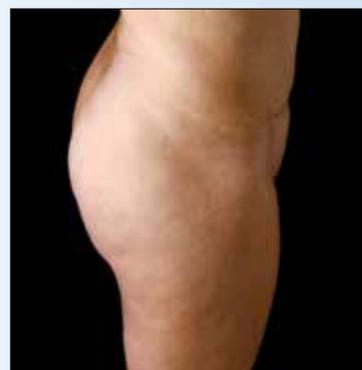
Before Tx



After four BTL Vanquish ME fat reduction and skin tightening treatments with the Flex applicator  
Photos courtesy of Annie Chiu, M.D.



Cellulite before Tx



After four weekly BTL Exilis Ultra and BTL Cellutone treatments  
Photos courtesy of Jason Emer, M.D.



63 year old female with cellulite before Tx



Four weeks after two BTL Exilis Ultra and BTL Cellutone treatments spaced two weeks apart  
Photos courtesy of Suneel Chilukuri, M.D.



Before Tx



After four weekly non-invasive butt lift treatments with BTL Exilis Ultra

Photos courtesy of Jason Emer, M.D.

additional applications, where we also add two therapies. First, we use BTL Vanquish ME off label; we lift the applicator slightly farther from the skin to cause bulk superficial heating without burning, which gives a maintenance tightening in the overall area. Then I use the poly-L-lactic acid filler Sculptra, which helps me sculpt the shape and also improves collagen. Women are going crazy for this, and even some men who want to change the shape of their buttocks." Nonetheless, a good healthy lifestyle is important to maintaining the result, he added.

Real demand is driven by consumer awareness and desire, but maintained by the aesthetic community's ability to deliver the goods. In Dr. Engleman's experience, demand is skyrocketing. "Patients have been waiting for a non-invasive, effective alternative to surgery and they're pleased with the ease of these treatments and quick results they see."

"As a key driver of demand, awareness must also be cultivated," said Dr. Chiu. "Many physicians use advertisements, and especially social media, to put the word out. The best success we've had, and this is true for any therapy we've adopted, is with internal marketing. It's a logical and natural progression for patients who've had facial treatments, for example, to become curious about treating other body areas. By building awareness among our existing clientele we encourage those we've treated in the past to try something else, and when they are happy, they refer others as well."

"Patients these days want non-invasive, quick results, no pain and no downtime," added Dr. Shel. "With BTL technologies compliance is high because patients don't have to think twice or get stressed out about the procedures. They are eager to undergo a full course of treatment and in the overall picture, it means more happy patients."

"The best results come from combination approaches, and BTL technologies are ideal for that, either among themselves or with other modalities we offer," Dr. Shel added. "I own many devices that work very well, but the cost of using them goes up due to expensive consumables. The lack of consumables makes any procedure much more attractive because it's more cost-effective. Once you've purchased the device the only cost is the time it takes to treat, so you can bundle it with other things more easily or provide complementary applications; put on a special event to attract new patients or reward loyal ones; or just be creative. My goal is 100% satisfaction and anything that helps me do this is appealing to me."

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