

# Nonsurgical Body Contouring 2020: More Customizable Treatments and Natural-Looking Results

By Kevin A. Wilson, Contributing Editor

Few areas of aesthetic medicine have enjoyed the kind of rapid advancement seen in nonsurgical body contouring. The market has been there, waiting, but until fairly recently the technology was inconsistent and disappointing. The gulf between surgical liposuction and modalities that were non- or minimally invasive was extremely wide.





“Body contouring is an essential part of any aesthetic practice,” said board certified plastic surgeon Sachin M. Shridharani, MD, medical director of LUXURGERY (New York City, N.Y.), “and as a plastic surgeon I see many patients seeking to improve their body appearance. Surgery is often the gold standard but many patients who come in these days are looking for non- or minimally invasive options, as well. These nonsurgical options are becoming more customizable and provide natural-looking results.”



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Radiofrequency (RF) technology set the stage, but initial offerings suffered from lackluster results and/or significant pain associated with treatment. Eventually RF modalities, alone or in combination with other modalities in a single platform, began to emerge that provided physicians the ability to recontour localized areas of unwanted fat using nonsurgical methods. Good results were available for the fitter subgroup of patients, but many physicians soon used RF as an adjunct to various liposuction techniques to enhance outcomes.

And though they can have a visible effect on fat deposits, most RF devices – then and now – best contribute by inducing contraction of overlying skin. When paired with microneedling, RF is still a popular method of handling skin laxity for body contouring. In fact, most therapies in the nonsurgical class are used to provide liposuction patients with an ideal result that surgery alone could not provide.

With the rise of cryolipolysis, the quest for a more aesthetically-pleasing silhouette became much more attainable and realistic, according to Deanne Mraz Robinson, MD, of Modern Dermatology of Connecticut (Westport, Conn.). “Cryolipolysis was what really woke up the industry and the public because treatment is easy, safe, relatively hassle-free and gives people results that they like,” she said. “It definitely touched off the avalanche.”

While initially costly, the advent of legitimate competition in non-invasive laser lipolysis and contactless selective RF improved accessibility to some degree. With the power to safely and effectively debulk fat deposits in even larger BMI patients, contactless selective RF took the field to another level without erasing the utility of other methods.

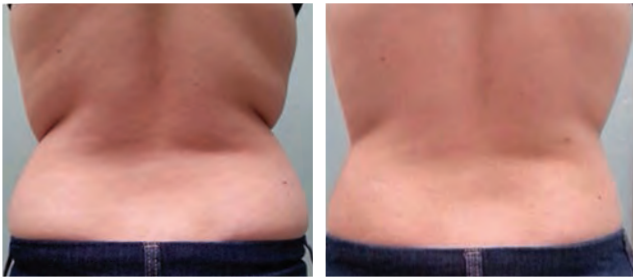
“Fat reducing devices involve thermal modulation, by heating or cooling, to destroy fat cells,” Dr. Shridharani expressed. “The body processes the crystallized or lysed fat cells and cellular debris, leaving a slimmer appearance in the treated area. However, the treatments are limited in how deep into the fat one can go without causing damage to surface tissue.”

Non-invasive stimulation of musculature, the latest technology to take the market by storm, attacks the problem from a completely different angle. “By inducing supramaximal contraction of target muscle groups, patients can achieve muscle hypertrophy, improved tone and increased strength from a few sessions that would take hours in the gym and still not adequately target some muscles,” Dr. Shridharani said. “For a lot of patients this makes a huge difference, and it makes sense to firm up the underlying musculature to support an overall body contouring result.”

Dr. Shridharani added that this is not a substitute for going to the gym, but rather a nice supplement to a workout regimen. One major advantage of this modality is its medical application – notable therapeutic effects seen with the improvement of difficult-to-train core musculature, including better posture and relief from various forms of urinary and rectal incontinence.

Experts agree that the ideal body contouring patient is already in relatively good physical condition and lives a healthy lifestyle, but has areas that are difficult to manage for one reason or another. “These are the patients that will get the best results,” said cosmetic surgeon Steven Bengelsdorf, MD (Nashville, Tenn.). “For many years I had to perform tummy tucks, liposuction and other invasive procedures,” he said, “but I don’t anymore because of the exceptional results we can obtain with minimally invasive body contouring.” He added that physicians rarely rely on a single technology to address a patient’s body contouring needs, so it is a multimodality treatment. “The best results are obtained by removing fat, toning the underlying muscle and tightening the overlying skin.”

Dr. Mraz Robinson agreed. “We offer several technologies including cryolipolysis and non-invasive laser lipolysis for fat, various skin tightening therapies and electromagnetic muscle stimulation.



Before and after the TightSculpting procedure by Fotona  
Photos courtesy of Adrian Gaspar, MD

I think many physicians offering body contouring in the market offer these types of therapies alone, and often in combination. It depends on the patient; some will do well with one therapy, but some will benefit greatly when other options are used to enhance the overall result.”

Among Dr. Mraz Robinson’s favorites are dilute biostimulatory fillers combined with RF or microfocused ultrasound for skin tightening as well as non-invasive fat reduction and electromagnetic muscle stimulation.

“Partnering muscle stimulation with liposuction helps provide a more cohesive, harmonious outcome,” Dr. Shridharani indicated. “We now have the unique opportunity in the industry to combine the proven, traditional fat reducing surgical and nonsurgical treatments with emerging technology for the best possible outcomes.”

Beyond these, which have been covered significantly in the media over the last decade, there are many more options available. Some are repurposed existing technologies, such as use of dilute biostimulatory fillers or skin tightening technologies, and others are completely novel.

Some technologies, by nature, are ideal for concurrently treating fat and tightening skin. TightSculpting™ from Fotona (based in the U.S. and Europe) is a unique non-invasive laser treatment that combines two procedures in one for sculpting and skin tightening on all body areas. This platform tightens the skin by generating new collagen, resulting in an overall improvement of contour laxity and elasticity in the treated areas. And, the exclusive delivery modes are used in concert for hyperthermic adipocyte destruction and collagen remodeling.

“TightSculpting combines the 2940 nm Er:YAG laser to tighten skin over the treatment area, with the 1064 nm laser in ultra-long pulse mode to penetrate to the

subcutaneous fat to cause apoptosis of adipocytes and tighten the fibrous septae. Together they provide an excellent global result for our body contouring patients with no downtime or disposables,” said Adrian Gaspar, MD, owner and director of the Espacio Gaspar Clinic of Gynecology, Anti-Aging and Bioregenerative Medicine (Mendoza, Argentina). “This is not for larger patients, but those requiring a visible, yet subtle revision of the silhouette by treating specific areas of unwanted fat.”

Science has shown that outcomes with non-invasive body contouring treatments such as cryolipolysis, non-invasive laser lipolysis or contactless selective RF are improved significantly with an adjunctive massage component. FDA cleared for the temporary reduction of the appearance of cellulite, the temporary increase in local blood circulation and to relieve minor muscle aches and pains, the Z Wave<sup>Q</sup> system from Zimmer MedizinSystems (Irvine, Calif.) is ideal for the task, according to Dr. Bengelsdorf. “Manual massage to facilitate fracturing of the frozen adipocytes was difficult and incredibly inconsistent. Z Wave has been a game changer. It is simple, safe, reliable and easy to delegate to trained staff,” he shared. Its projectile has a five times greater mass than pneumatic systems for a softer pulse and maximum patient comfort to the patient. An innovative water-cooled generator ensures high efficiency and durability.

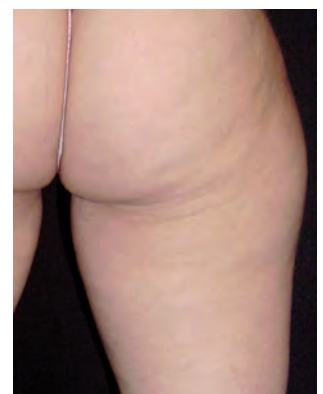
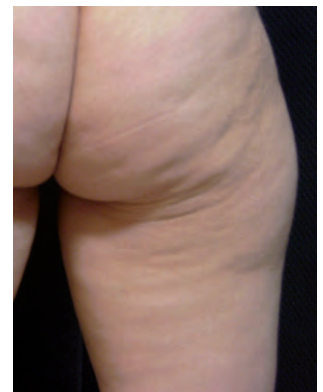
It is also indicated for cellulite, a condition that almost all women endure. “It is a complicated condition and some cannot be treated successfully, but mostly we are dealing with a combination of fat hypertrophy in conjunction with fibrous septae tethering the skin to tissue underneath,” Dr. Bengelsdorf pointed out. By improving local microcirculation and reducing the fat, the appearance of cellulite is improved. “Patients we treat with the Z Wave tend to be very satisfied with their results.”



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Before and after treatment with the Z Wave<sup>Q</sup> system from Zimmer MedizinSystems  
Photos courtesy of Zimmer MedizinSystems



Ultracontour NG from MedixSysteme AG (Ruggell, Liechtenstein) has eight key benefits in one machine from a hands-free protocol to multiple applicators, and painless non-invasive treatment with thermal, mechanical and vibrating effects safe for all skin types. Ultracontour NG offers up to 20 piloted and custom-programmed emitters which can be placed at various body locations simultaneously to treat subcutaneous fat in the arms, belly, legs, buttocks and love handles. Furthermore, specific programs are available for men and women.

The emitters deliver highly focused fractionated ultrasound (termed sonodynamic therapy) for point-by-point targeting at the precise depth of local adiposity from between 0.8 cm and 1.3 cm, but with the unique UMD (ultrasonic mechanical drainage) effect automatically delivering intense pulses to the fat in larger areas automatically. The operator can choose up to five levels of UMD power based on area treated and fat thickness. And, there are six UMD belts offering the flexibility to adapt to each patient's individual body areas.

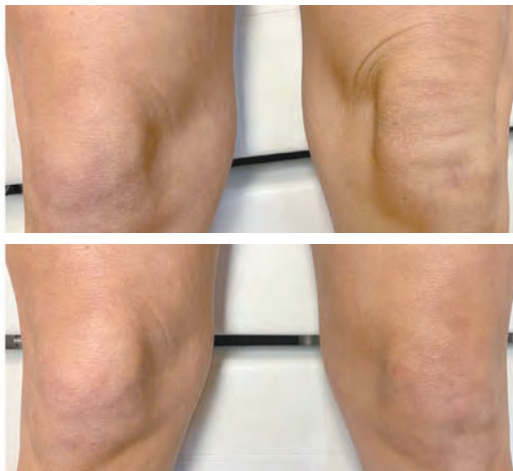
According to Fernando Gagliardi, manager of BodyContour (Luxembourg), the improvement of lymphatic drainage is especially beneficial to women during menopause or after childbirth. "Ultracontour NG provides a mechanical and thermal effect that is long-lasting for unwanted fat and cellulite. It is safe, easy to use, provides visible results over time, and can treat the full body within 20 minutes. It appeals to both men and women."

Thread lifting has legitimate body applications, according to Jonathan M. Sykes, MD, director of plastic surgery at the Roxbury Institute Beverly Hills (Beverly Hills, Calif.). "Threads create improvement without incisions or much downtime. Lifting and volumizing with threads involves both the volume of multiple implanted threads, and the generation of new collagen on this thread scaffold," he explained. "They work especially well in areas with fine, crepey skin."

Les Encres Threads (Nashville, Tenn.) feature the largest thread selection in the market, with more than 60 offerings such as Mono, Screw, COG and Pressure Molded threads from PCL, PLLA and PDO compounds. Specialty threads are also offered for use around the infraorbital area, rhinoplasty region and the rest of the body. "Threads are well-suited for



Before and after treatment with Ultracontour NG from MedixSysteme  
Photos courtesy of Fernando Gagliardi



Before and after a knee lift using Mono PDO threads from Les Encres  
Photos courtesy of Linda Gordon, ACBP

lifting the breast, buttocks, over the knee, the upper arm and more. They work by repositioning as well as volumizing, which provides an additional repositioning effect,” Dr. Sykes noted. “Threads are particularly good for creating a look customized to the patient’s individual needs. Similar use of fillers is often prohibitively expensive due to the amount needed.” Les Encres threads are packaged in a custom designed, heat- and moisture-resistant thread pouch to maintain product stability and viability.

While injectable body contouring therapies aren’t exactly new, the quality of offerings has improved considerably, according to dermatologist Michael H. Gold, MD, director of the Tennessee Clinical Research Center and Gold Skin Care Center (Nashville, Tenn.). “This field has changed dramatically over the past several years to include not only improvement in skin tightening and circumferential reduction, but fat reduction and muscle tightening/stimulation as well. There are now truly viable injectable alternatives with good science behind them, and more are coming.”

One clear example is Renuva adipose allograft matrix from MTF Biologics (Edison, N.J.), an off-the-shelf injectable alternative to autologous fat transfer. Renuva restores volume in the face, hands and body in a short, in-office procedure. “It contains the same growth factors, collagen and proteins present in autologous fat,” Dr. Gold said. “This adipose-derived matrix treatment can be used virtually anywhere on the body in need of volumizing. Over time, the adipose matrix is replaced by your own fat which, for those with remodeling needs, can be a major benefit.” The product is processed to preserve the extracellular matrix containing collagens, proteins and growth factors found in adipose tissue. The resulting matrix serves as a framework to support the cellular repopulation and vascularization at the site of injection. Renuva is to be used where fat naturally exists. “This is a perfect addition to the field.”

Injection adipocytolysis has gained prominence, according to Dr. Shridharani. “This treatment achieves very localized yet highly customizable results. ATX-101, or Kybella from Allergan (Irvine, Calif.), was FDA approved for the submentum, but is commonly used off-label on the body for specific areas such as the pubis, around the knees or bra fat. Use on larger areas

is possible and routinely performed in my clinic but can be prohibitively expensive for some.”

Endo Aesthetics, headquartered in Malvern, Pa. has made recent strides in the development of an injectable cellulite therapy that is generating buzz. Qwo™ (collagenase clostridium histolyticum-aes), is the first injectable cellulite product FDA approved for the treatment of moderate to severe cellulite in the buttocks of adult women. According to Dr. Mraz Robinson, the enzyme components of Qwo specifically target collagen types 1 and 3 to release the fibrous septae for a smoother appearance in areas riddled with cellulite. “It makes a lot of sense to provide a meaningful non-invasive solution that specifically targets this crucial aspect of cellulite,” she said. “We can then address other aspects of cellulite using existing technologies, if needed, such as fat reduction, skin tightening or biostimulatory fillers.”

Dr. Shridharani was involved with clinical trials for Qwo. “I have seen marked benefit for patients in the clinical trial followed out to one year in my practice. The future is bright for Qwo.”

Expectations management is still a key component of the therapeutic continuum, but that has also changed, according to Dr. Mraz Robinson. “With the Internet and social media, patients tend to spend time researching beyond the hype and have access to information and images that regular patients like themselves have shared, but we still need to guide patient expectations carefully because Instagram and other media may not provide a realistic vision for that individual.”

“The take-home message is that we have a wide variety of truly great options for non- and minimally invasive body contouring,” said Dr. Mraz Robinson. “Surgery is still the gold standard, but the distance between surgical and nonsurgical has been reduced considerably, and in many cases the two are complementary. Typically, patients who are candidates for nonsurgical options are more than willing to accept whatever trade-off exists between the results of surgery and the associated risk, recovery and downtime. And for many patients, given the nonsurgical options we now have, surgery just isn’t the ideal choice anymore.”



Before and eight months after Renuva procedure by MTF Biologics  
Photos courtesy of MTF Biologics