



THE FUTURE OF FAT REDUCTION

Weight-Loss Drugs Increase Need for Body Contouring and Other Aesthetic Procedures

BY JASON MAZDA

The body contouring business was good. Valued at \$7.3 billion by at least one market research firm in 2022, the global market for body contouring was estimated to have a robust 6.9% compound annual growth rate (CAGR) through 2032, driven by “the increasing number of obesity cases in developed economies and throughout the world” as well as safer, more effective new technologies.¹ But then weight-loss drugs took off. The semaglutides Ozempic, Rybelsus, and Wegovy combined for \$21.1 billion in 2023 sales—an 89% increase from 2022.² Add the \$5.2 billion in sales of the tirzepatide Mounjaro last year after its mid-2022 launch, and weight-loss drugs already were raking in almost three times the forecasted 2032 market for body contouring.² Suddenly, the field of tucks, lifts, liposuction, and other aesthetic procedures looked dramatically different; but change can be a good thing.

Semaglutide and tirzepatide are hormone-mimicking drugs originally

approved as diabetes therapies³ but increasingly available for larger segments of the population.^{4,5} The American Society of Plastic Surgeons,⁶ American Med Spa Association,⁷ and the International Association for Physicians in Aesthetic Medicine⁸ offer guidance on weight-loss medications, and the *PRS Global Open* journal cites “a growing number of cosmetic dermatologists and plastic surgeons prescribing the drugs.”⁹

Regardless of whether prescribing semaglutides and tirzepatides in-office or working with patients who get the prescriptions elsewhere, aesthetic medicine practitioners have largely been forging a new path whereby the medications do not replace their traditional procedures but, instead, complement them—as well as skin tightening, muscle stimulation, and more.

“Surgeons who perform gastric bypass and other weight-loss surgeries will be negatively affected, but I expect an increase in demand for body contouring procedures as patients better understand the complementary poten-

tial,” said Andres Sarraga, MD, FACS. “We are already seeing an increase in demand for procedures to address deflation and loose skin.”

INCORPORATING WEIGHT-LOSS DRUGS

Suneel Chilukuri, MD, said he initially was resistant to embracing the semaglutide craze because it cut into his body contouring business, but he came to a realization: “We are going about it all wrong,” he said. Essentially, body contouring and systemic weight-loss drugs do very different things. “People are losing 30% to 35% of their muscle mass as a result of taking semaglutides and tirzepatides,” Dr. Chilukuri said. “That muscle mass is critical, especially because we already experience natural genetic muscle loss over time.” Dr. Chilukuri refers patients to a weight-loss clinic—one recently opened just two doors down from him—but he recommends that they return to his office for supplementary treatment. “With a single session of whatever your treatment of choice is for muscle building,” he said, “the patient can maintain that muscle mass even as they keep the weight off long-term.”

Kay Durairaj, MD, chose to keep the entire combination therapy in her office, collaborating with cardiologist and weight-loss specialist Danielle Belardo, MD. “She works side by side with me and prescribes FDA-approved, prescription-strength semaglutides and tirzepatides,” Dr. Durairaj said. “She also works with patients on cholesterol, hypertension, etc. Patients’ side effects are rare and dosing is increased very gradually to ensure patients tolerate the medications successfully. It is common to see 15% to 20% total body weight reduction in 6 to 12 months.”



Dr. Durairaj's team performs a comprehensive medical evaluation on every patient and proactively connects them with a nutritionist to help during treatment. "When you are not hungry, you can forget to eat, which causes problems such as hair loss and muscle atrophy due to inadequate protein intake," Dr. Durairaj said. "In addition to dietary guidelines, each of our weight-loss patients gets a fitness program for the gym and a face maintenance plan for 'Ozempic Face' prevention. We show people before-and-after photos of faces with and without gradual maintenance and let them see the benefit of collagen stimulating treatments to build facial foundation during weight loss."

Dr. Sarraga brings an obesity medicine expert to his office twice a week. She prescribes the drugs, and Dr. Sarraga monitors the patients to determine when they are ready for accompanying surgeries. "Body composition analyses are very important to track," Dr. Sarraga said. "Losing 10 lbs, is not good if it was 60% muscle and 40% fat. It is very important that these patients exercise and balance their diets with more protein, and we can help them with muscle-stimulating technologies."

COMPLEMENTARY PROCEDURES

When patients are ready for surgery, Dr. Sarraga often performs liposuction or CoolSculpting to address stubborn fat in certain areas—and he expects both of these procedures to continue as mainstays for the foreseeable future. "Even as patients lose significant amounts of weight, they will have areas that are diet- and exercise-resistant," Dr. Sarraga said.

In other areas of the body, weight-loss drugs can be almost overly effective, creating a gaunt look with saggy skin. Dr. Durairaj's "Ozempic face" prevention plan includes facial foundation building using collagen biostimulators. "As the facial fat changes and thins, you can still have volume along with the lateral lift and support," she said, adding that collagen biostimulators,

conveniently, work at a gradual pace to a healthy weight-loss regimen. In areas where the patient prefers to look slimmer but does not want their skin to sag, skin tightening is a remedy. Suzanne L. Kilmer, MD, says patient demand for skin tightening already has increased notably in recent years. "That may be the No. 1 effect that semaglutides have had," Dr. Kilmer said, "because you lose weight so fast." Dr. Kilmer also uses muscle stimulation devices for the face; both radiofrequency and ultrasound devices can be effective for this. "It almost looks like filler, but you are just redistributing and tightening up certain muscles to get a filler-like effect that is very natural looking," Dr. Kilmer said.

Muscle stimulation and/or fillers can become necessary in other parts of the body as well. Dr. Chilukuri notes the importance of avoiding what has become known as "Ozempic butt" after rapid weight loss. "It is not just the appearance but actual functional use of those muscles," Dr. Chilukuri said. "We need to utilize the buttocks as well as the lateral portions of our legs to stabilize when we are, for example, stepping off the curb or stepping into a car, to avoid stumbling and breaking a hip. So we are using fillers in combination, and what I love is when we are creating the appearance of a tighter buttock, lateral thigh, or even top of the knees. Most times, I do it immediately in combination. I inject filler and then do a subcision for any kind of dimpling we see for cellulite, and I immediately apply HIFEM technology along with that to distribute it. Often, I pair that with an acoustic wave device to distribute the collagen stimulator broadly through that area."

While muscle stimulation can be utilized simply to counteract the loss of muscle mass from weight-loss drugs, Dr. Kilmer noted that many patients request it for aesthetic purposes after weight loss as well. "Now that they look thinner, they want to look better," she said. "They want to build abdominal muscles, for example,

Often, that leads them to subsequently develop healthier habits because they feel so much better."

STATE OF THE ART

Dr. Kilmer noted that most device-based fat reduction technologies work via heating or cooling. "When fat is heated or cooled to certain temperatures for certain amounts of time, it goes into apoptosis, which is like a slow death, unlike liposuction or deoxycholic acid injections," Dr. Kilmer said. Cryolipolysis is the most common method of cooling, while radiofrequency and lasers are both popular methods of heating.

One of Dr. Kilmer's early studies on cryolipolysis involved firefighters who were in exceptional shape but had love handles. "With devices, you can target a specific area of fat and typically achieve between 12% and 20% fat loss in the area where you apply the device," she said.

As effective as the current methods of cryolipolysis are, researchers are working to develop even better technology. A 2020 article by Lilit Garibyan, MD, et al hypothesized that "local injection of a physiological ice slurry directly into target adipose tissue would lead to more efficient and effective cryolipolysis" because "conventional cryolipolysis with topical cooling requires extracting heat from subcutaneous fat by conduction across the skin, thus limiting the amount and the location of the fat removed," and their initial testing on swine was promising.¹⁰ A subsequent 2023 article noted that the treatment was well tolerated in mice and rats, and that significant weight loss was noted at day 21 post-treatment, demonstrating that "ice slurry is promising as a minimally-invasive treatment to reduce visceral adipose tissue."¹¹

PROCEEDING WITH CAUTION

Like most treatments, combination therapy involving weight-loss drugs must be utilized with great caution. Semaglutides alone bring risk factors



that any doctor recommending or prescribing them should understand. “Changes in the eye can happen with the microvasculature,” Dr. Durairaj said. “Medullary thyroid cancer is a very rare but known risk. Pancreatitis is a significant risk because of delayed gastric emptying; acid reflux and constipation also can occur as a result of this.” Dr. Durairaj also noted that she recommends a period of 2 weeks without semaglutide shots before any surgical procedure involving general anesthesia, to avoid gastroparesis and potential aspiration, so the GI tract can speed up and function normally.

Ethics become an additional issue when patients, such as those with body dysmorphic disorder (BDD), request weight-loss and/or body contouring treatments. “Similar to every plastic procedure, injectable, etc, psychological screenings are critical when incorporating a semaglutide or tirzepatide,” Dr. Durairaj said.

Even patients who simply want to lose 5 or 10 lbs and have been misinformed about the drugs are a concern. “Some patients should be shifted more toward resuming exercise and talking to a nutritionist, and we can just use some of the body sculpting technologies to supplement that,” Dr. Sarraga said. “I don’t want patients treating this medication like getting a haircut or even a little bit of Botox. These medications, obviously, have side effects. They may have complications. We really want to use them for the patients who merit it, and not just anybody who walks in wanting to lose 5 or 10 pounds. This is where ethics and doing the right thing for the patient is the way to go.”

As with many therapeutics, an exit strategy is important, though many doctors recommend that patients stay on low doses of weight-loss drugs long-term. “Microdosing of semaglutide is the next phase that I believe will become common, because many people have lost the weight and are now concerned about how to maintain,”

Dr. Durairaj said. “Microdosing is currently undergoing phase 0 with clinical trials with the NIH with possible future benefits not only for maintenance but also for longevity, improving neurologic state, and decreasing the risk of dementia, Alzheimer’s, and other diseases. Fertility improves with microdosing. It can help with multiple sclerosis. Several studies now show that glucose control improves the entire body. I think it will definitely become a longevity treatment as people seek to add a few more years to life by improving their mitochondrial health. One of the best ways to control DNA damage is to reduce the amount of sugar in the bloodstream, which reduces glycosylation of proteins, which makes you more efficient at repairing your DNA and leads to longer, more stable, less disease-filled lives.”

An important key, Dr. Sarraga notes, is encouraging a healthy lifestyle. “If the patient is not making lifestyle modifications at the same time, they may end up in a worse place than they were before,” Dr. Sarraga said. “Additionally, while these medications are not addictive, patients can become psychologically dependent. However, in a scenario where they’re being monitored through laboratory work, examinations, and body composition analyses, we can set up these patients for success and keep them on a very low dose or even get them off entirely, and return them into the world in a better state than they came to us.”

‘SO MANY SUCCESS STORIES’

Clearly, traditional aesthetic procedures not only still have a place in the world of semaglutides and tirzepatides, but they are perhaps even more important. Dr. Kilmer noted that, during a recent webinar about combining these treatments, attendees from weight-loss clinics discussed the possibility of incorporating body contouring and skin tightening into their practices. “I said, ‘OK, but know what you are doing,’” Dr. Kilmer said. “There are side effects that we are used to thinking about that

someone else might not consider.”

That possibility perhaps underscores the importance of dermatologists and plastic surgeons taking the lead on weight-loss processes whenever possible. “I received a lot of requests for prescriptions prior to bringing in a specialist,” Dr. Sarraga said. “I considered what we currently had in our office, our reputation, the way that we took care of our patients, and the fact that I was seeing that a lot of these patients going to medspas and other non-doctors. They can even go online and get a prescription without even being examined by a doctor. I decided that I wanted to be able to offer this option for our patients in a responsible way.”

In that way, combining the latest weight-loss drugs with the latest aesthetic procedures can be a win-win for both patients and practices. “It has been amazing in our practice,” Dr. Durairaj said. “Patients really feel confident because they are doing it in a medically supervised setting, and we have so many success stories.” ■

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