The increasing use of Ozempic, along with other drugs for weight loss, will likely impact aesthetic medicine, according to experts.

Semaglutide, the active ingredient in Ozempic, is a glucagon-like peptide-1 (GLP-1) receptor agonist currently approved by the US Food and Drug Administration for the treatment of type 2 diabetes in adults. Ozempic is a weekly injection originally designed to improve blood sugar control, as the active ingredient semaglutide stimulates insulin release and suppresses glucagon release.

A higher-dose form of GLP-1 receptor agonist marketed as Wegovy is approved for obesity associated with type 2 diabetes, high blood pressure, or high cholesterol. However, increasing numbers of non-obese individuals without other clinical indications are using Ozempic off-label for rapid weight loss and reduction in body fat, and aesthetic medicine specialists are seeing them to manage such side effects as facial hollowness and sagging skin.

“Overall, while the precise mechanisms by which Ozempic affects fat metabolism are not fully understood, it is clear that this medication has significant effects on body weight and composition,” said Subhas Gupta, MD, PhD, chairman of the department of plastic surgery at Loma Linda University School of Medicine, CA, in an interview.

Dr. Gupta’s practice is seeing more patients who are using Ozempic and other GLP-1 receptor agonists (such as Mounjaro, Wegovy, Saxenda). In a survey of the new body contouring patients presenting to his office in March 2023, 46% had been using a GLP-1 receptor agonist specifically for weight loss, he said. “Many of these patients were attempting to reach body mass index (BMI) thresholds for safe body contouring surgery, such as tummy tucks, body lifts, and breast lifts,” Dr. Gupta noted.

Most of Dr. Gupta’s patients who report symptoms of “Ozempic face”
are somewhat older, with a threshold of approximately 35 years of age. These patients note hollowing in their temple regions and deeper folds between their nose and lips, which represent loss of the well-defined fat pockets of the temple fat pad and the malar eminence,” Dr. Gupta told *Modern Aesthetics*. “The compartments that overly bony structures, such as the forehead and cheek bone, appear to be the most sensitive to weight loss in general,” he said. “We see the same areas ‘wasting away’ in post-surgical weight loss after patients undergo bariatric surgery such as gastric bypass,” he added.

Although the face is the most obvious region of skin aging reported by patients, Dr. Gupta said he has observed increased laxity in the trunk of patients who have used rapid weight loss drugs. This laxity is “greater than I expect from non-medication assisted weight loss, and has implications for any subsequent tightening or lifting procedure,” he explained.

**FAT, FILLERS, AND LASERS**

Fat transfer is one way to address patient concerns about facial hollowing; while it appears to be a durable procedure, the data on its use in patients after weight loss with Ozempic or other similar drugs are limited, Dr. Gupta said. Hyaluronic acid fillers can be used to temporarily correct facial depressions, he said. Dr. Gupta also has used fractional CO2 lasers to provide some skin tightening for patients complaining of facial hollowing, however, “this is a very early experience with these patients,” he said.

Dr. Gupta said he expects to continue to see an increased demand for facial volumizing procedures in patients who have used weight loss drugs. “I am most interested to see the anatomic changes in the body that will occur with extended use of these agents,” he noted. “We may need to adjust our body contouring and lifting procedures if there appears to be continued changes in the skin support in the abdomen and trunk with GLP-1 agonist use.”

Barriers to managing aesthetic concerns in these patients include their desire to continue with their medication, since facial fat loss and skin descent will likely recur after an aesthetic correction if the medication is continued, Dr. Gupta said. Therefore, patients may need to take “Ozempic holidays” to allow facial fat metabolism and anatomy to recover. “This will not be an option for patients taking the medications for diabetes control, but may be an effective strategy for those taking it primarily for weight loss,” he emphasized.

**IT’S NOT THE DRUG, IT’S THE WEIGHT LOSS**

Most cosmetic and aesthetic dermatologists see people complaining because they can’t lose weight, Joe Niamtu, DMD, a specialist in cosmetic surgery double-boarded cosmetic facial surgeon based in Richmond, VA, told us. “If you gain or lose weight by any means or medication, the face is one of the first areas to show it,” said Dr. Niamtu, who is also an international lecturer and author of multiple textbooks on cosmetic facial surgery.

“The face is an area of fat storage, and when you lose weight, especially quickly, you see atrophy in the temples or cheeks, in dramatic weight loss people may look hollow or drawn,” he continued. This occurs whether you have lost weight dramatically through diet, exercise, bariatric surgery, or having been stranded on a desert island with limited food, he told *Modern Aesthetics*.

The concept of “Ozempic face,” is a myth, said Dr. Niamtu. “It is really just ‘rapid weight loss face,’” he said. “There is nothing about Ozempic or any other weight loss product that specifically impacts the face, but the appearance change is rapid in some people.”

Dr. Niamtu said he has seen many patients who have used Ozempic or other weight loss products prescribed by their physicians, and has seen only one so far who experienced significant volume loss in her face after taking Ozempic for weight loss as seen above.
"WE MAY NEED TO ADJUST OUR BODY CONTOURING AND LIFTING PROCEDURES IF THERE APPEARS TO BE CONTINUED CHANGES IN THE SKIN SUPPORT IN THE ABDOMEN AND TRUNK WITH GLP-1 AGONIST USE"

Common Complaints and Patient Preferences

"Accelerated weight loss is here to stay, with its resultant rapid changes in facial fat pads volume, and we aesthetic dermatologists need to learn how to deal with it," said Ava Shamban, MD, a medical and cosmetic dermatologist in Santa Monica, CA, in an interview.

The impact of rapid weight loss on the face is a loss of volume in both superficial and deep fat pads, said Dr. Shamban. "The skin envelope has nothing to drape over, and therefore it sags."

Many options are available for patients who want to remedy the facial changes associated with weight loss, Dr. Shamban said.

Cosmetic and aesthetic dermatologists "can easily re-volumize the face to restore youthful contours," she said.

Tools available for this process include microneedling radiofrequency (MNRF) treatments, as well as lasers and focus ultrasound. "We can deliver a better-than-ever face that will pair nicely with a slim body habitus," Dr. Shamban said.

However, as with all aesthetic procedures, patient education is key to achieving optimal outcomes, Dr. Shamban added. "The biggest barrier is educating patients effectively, so they understand the process of facial rejuvenation."

Start with Conservative Procedures

Ozempic and other similar products, such as the higher-dose Wegovy which is approved for treatment of obesity, are not without potential side effects such as pancreatitis, Dr. Niamtu noted. "It is not going to surprise me if we see some side effects that we don’t know about now, and you always have to be a little skeptical."

Dr. Niamtu said that cosmetic and aesthetic dermatologists may see more patients seeking increased facial volume after weight loss if the use of Ozempic and other similar medications continues to expand. However, history shows that patients who experience dramatic weight loss with medications or bariatric surgery often regain the weight in the absence of ongoing diet and lifestyle changes. Therefore, he advises initially using something reversible, such as fillers, that could be dissolved, or facial implants that are also reversible. He further states that volumization with fat injection may not be the best initial treatment, as patients regaining weight can cause the fat to grow, or a patient may develop an overtreated appearance.

Looking ahead, no one knows how the expanded use of Ozempic will play out in aesthetic medicine and in other specialties, Dr. Niamtu said. "Right now, it seems a relatively safe and effective drug, but more research is needed on long-term effects."

"The best scenario will be patients using these drugs to kick start weight loss, but developing true lifestyle changes of diet and exercise," he said.