## **Demand Soars for Postbariatric Cosmetic Fixes**

## BY DOUG BRUNK

he proliferation of bariatric surgery procedures performed each year in the United States has led to a burgeoning demand for body contouring, a subspecialty of plastic surgery designed to help patients improve their cosmetic appearance.

Prior to 2000, it was rare for patients who experienced massive weight loss to seek help from plastic surgeons; in fact, this patient population was almost nonexistent, according to Dr. Al Aly, a board-certified plastic surgeon who practices in Iowa City, Iowa.

Today, the demand for procedures such as abdominoplasties, upper arm lifts, and thigh lifts has never been higher. According to the American Society of Plastic Surgeons, between 1992 and 2008 the number of abdominoplasties performed grew by 593%, from 16,810 to 116,512; the number of thigh lifts grew by 731%, from 1,023 to 8,504; and



the number of upper arm lifts grew an astounding 2,982%, from 434 to 13,374. Meanwhile, the number of lower body lifts-a procedure that essentially did not exist in 1992-stood at 8,647 in 2008.

Dr. J. Peter Rubin, a board-certified plastic surgeon who directs the multidisciplinary Life After Weight Loss clinical program at the University of Pittsburgh, estimates that 90% of his clinical practice involves body contouring after massive weight loss. "These are fairly complex and technically challenging procedures that are best done by surgeons who have a strong grounding in plastic surgery principles and strong training in plastic surgery," said Dr. Rubin, coauthor of "Aesthetic Surgery After Massive Weight Loss" (Elsevier Medical Publishing, 2006).

Dr. Aly evaluates potential body-contouring candidates a minimum of 18 months after they have undergone bariatric surgery. "We tend to not want to operate on people who are aiming for specific weight levels," said Dr. Aly, author of "Body Contouring After Massive Weight Loss" (Quality Medical Publishing, 2005). "We want to operate on people who are in a comfortable lifestyle and are not doing heroic things to reach a particular weight level. If you have access to the bariatric surgeon that the patient was referred from, that's one of your best sources. Ask them if they feel that the patient has stabilized their weight loss.

Dr. Susan Downey, a board-certified plastic surgeon who practices in Los Angeles, addresses goals and expectations with body-contouring candidates up front. She asks them about their cosmetic priorities, how long they've been at their present weight, and whether they've had plateaus with their weight loss. In her practice, abdominoplasty

list of procedures requested, followed by breast lift/augmentation: arm lift; thigh lift; and lower body lift (belt lipectomy), a combination procedure that abincludes dominoplasty, a thigh lift, and a buttock lift. "What bothers

me [from a cosstandmetic point] may not be what bothers them," Dr. Downey

noted. "I had one patient who wanted her eyes done first because the bags under her eyes got more pronounced as her face got smaller from the weight loss. You can do two or three procedures if a patient is in good medical condition. We usually limit ourselves to about 6-8 hours of surgery.'

According to published reports, Dr. Downey said, up to 30% of patients with massive weight loss have complications after body contouring. "I would say it's up to 10% for a major complication and up to 30% for a minor complication," she estimated. "These patients have a higher rate of hematoma formation, a higher rate of seroma, and wound-healing issues. A lot of it has to do with the fact that the skin is so overstretched at the time that you do the surgery."

Extensive scarring after the procedures is common, "but the improvement in body contour is quite dramatic and well worth the scars," she added.

Recovery time varies among patients, Dr. Aly said, and tends to be longer after a belt lipectomy (4-6 weeks) than after



bariatric surgery patient are shown.

Before and after results of an upper body lift in a male

other common procedures, including an upper body lift (2-3 weeks), an upper arm lift (2-3 weeks), and a thigh lift (2-4 weeks).

Some medical insurance companies cover the panniculectomy portion of the abdominal contour, including anesthesia, but other procedures generally are not covered. "That's one of the issues with this field: The insurance companies are bound to the criteria of medical necessity," Dr. Rubin said. "It's sometimes hard to justify true medical necessity by the standard of the insurance company for some of these body-contouring operations, despite the overwhelmingly positive impact it will have on the person's quality of life. With these economic times, I'm not sure we're going to see that getting better quickly."

These procedures produce an immeasurable impact on patient self-perception, Dr. Aly stated, recalling that a patient with massive weight loss once told him, "[Bariatric surgery] gave me back my life. It's part of a life transformation. Plastic surgery allows me to enjov it.'

## Weight-Loss Chart Predicts Long-Term Bariatric Outcomes

## BY BRUCE JANCIN

GRAPEVINE, TEX. — The use of a standardized longitudinal weight-loss chart reliably permits identification of underperforming patients within the first month after bariatric surgery, according to a data analysis of more than 1,200 patients.

"This project was inspired by the utility of pediatric growth charts. They allow monitoring of height and weight for any given age, and assessment of abnormal growth. Interventions are sometimes possible when children are identified as being below the norm for growth," Dr. Lindsey S. Sharp explained at the annual meeting of the American Society for Metabolic and Bariatric Surgery.

The gastric bypass surgery weight-loss chart can similarly be used to target patients for interventions aimed at boosting their long-term outcomes. The chart was derived through retrospective analysis of prospectively collected data on 1,274 patients who underwent primary Roux-en-Y gastric bypass at Duke University, Durham, N.C., between 2000 and 2007.

The percentage of excess weight loss was determined for each patient at follow-up clinic visits sched-

uled for 1, 3, 6, 12, and 36 months. The purpose was to define the normal pattern of weight loss following gastric bypass, use that information to generate weightloss nomograms, and then learn whether early weight loss predicts long-term success. It turns out that it does, according to Dr. Sharp of Duke.

According to the chart, a 12%-15% excess weight loss at the 1-month postoperative visit places a patient in the second quartile. The third quartile is a 16%-18% excess weight loss, while more than 18% excess weight loss is the fourth quartile.

At 12-month follow-up, most patients remained in the same weight-loss quartile they were in at 1 month post surgery. Being in the first weight-loss quartile at 1 month, with a 0%-11% excess weight loss, had a 39% positive predictive value for being in the first quartile at 12 months. The negative predictive value was 81%. Sixty-one percent of patients in the first quartile at 12 months, with a 15%-53% excess weight loss, were in the first or second quartile at 1 month.

Moreover, 72% of patients in the fourth quartile at 12 months, with a greater than 70% excess weight loss, were in the third or fourth quartile at 1 month. These trends continued at 36 months.

"The take-home message here is that, in general, patients who do well initially are likely to continue along that path, and those who have first-quartile weight loss at the first postoperative visit are at risk of having continued poor weight loss," Dr. Sharp explained.

Further analysis showed that an excess weight-loss velocity of 2% or more per week between the 1- and 3month postoperative visits had a specificity of 90% for being above the first quartile for excess weight loss at 1 year. "Our suggested algorithm for follow-up includes assessment of excess weight loss at the first postoperative visit. If patients are found to be in the first quartile, then they should be assessed for dietary, exercise, and psychological factors that could be modified. Frequent follow-up between the first- and third-month postoperative visits can be used to assess the success of the interventions using the excess weight-loss velocity. Hopefully, patients will improve their weight loss. In continuing to follow them, if they again drop down to the first quartile, you can institute new interventions," Dr. Sharp said.

The surgical weight-loss charts will eventually be published in the journal Surgery for Obesity and Related Diseases.