Massive weight loss increases risk of complications in body-shaping surgery
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Patients who lost more than 100 pounds and those who shed weight through bariatric surgery had the highest risk of complications from later surgical procedures to reshape their leaner bodies, a new study from UT Southwestern Medical Center shows.

The study, published in the Aesthetic Surgery Journal, compared surgical complication outcomes for 450 patients who underwent body contouring, a type of surgery to remove excess sagging fat and skin to improve body shape.

"This is one of the first large-scale studies comparing outcomes in patients losing significant amounts of weight via surgical and nonsurgical means," said Dr. Jeffrey Kenkel, Professor and Acting Chairman of Plastic Surgery at UT Southwestern, and senior author of the study. "Major weight loss was a significant risk factor for wound complications in body contouring surgery."

Of the 450 study participants, 124 lost 50 pounds or more before their surgery. Patients included men and women in all age groups who completed body contouring procedures including body lifts, tummy tucks, thighplasty, arm lifts, breast lifts, breast reduction, and liposuction.

Dr. Kenkel and his peers conducted statistical analyses to identify risk factors and to determine the probability of patients experiencing healing issues or complications after their surgery.

Patients with weight loss of more than 100 pounds were found to be at higher risk for complications, regardless of weight loss method. Furthermore, post-bariatric patients had the highest rate of complications. Gastric bypass patients were at greater risk than patients who lost weight through diet and exercise. Patients who underwent restrictive bariatric procedures, such as gastric sleeve or the Lap-Band, had the lowest risk of complications among surgical weight loss patients.

With these considerations in mind, Dr. Kenkel investigated physiological factors that make massive weight loss patients susceptible to complications, such as infection, delayed healing, ruptures, and reddening of the skin.

"In addition to identifying massive weight loss patients as a vulnerable population, these types of studies are important to help surgeons improve patient care. The data that we have collected is valuable in managing known risks and designing pre- and post-surgical treatment," said Dr. Kenkel, who holds the Rod J. Rohrich, M.D. Distinguished Professorship in Wound Healing and Plastic Surgery.

One reason why post-bariatric patients have more complications is nutrition. Following bariatric procedures, many patients consume less than 1,000 calories daily, which leads to lower protein levels and nutritional deficiencies. Their bodies adapt to their new nutritional state, which then changes when the body becomes stressed by surgery.

"It is imperative that patients account for their dietary deficiencies and prepare their bodies for surgery," said Dr. Kenkel, Director of the Clinical Center for Cosmetic Laser Treatment and Chief of Plastic Surgery at UT Southwestern University Hospitals. "Nutrition plays an important role in skin healing, collagen production, and the generation of new blood vessels, all of which are important during recovery."

To improve patient health, UT Southwestern plastic surgeons currently conduct nutritional assessments and administer protein and vitamin supplements.

"Surgeons should monitor these patients carefully and make sure their vitamin and protein supplements are complete. Daily protein supplements are vital for achieving complication rates that are in line with non-bariatric candidates,"
Dr. Kenkel said, "We can also enhance recovery by tailoring pre-operative care to the patient's weight loss amount and method. As our understanding of these risks advances, we are able to provide the growing number of body contouring patients the best possible circumstances for a safe recovery."

Provided by UT Southwestern Medical Center


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