Individualizing Bariatric Surgery

DURING THE LAST DECADE, THE FIELD OF BARIATRIC SURGERY HAS EVOLVED TO BECOME THE POTENTIALLY LIFESAVING SET OF PROCEDURES IT IS TODAY. HELPING PIONEER THE WAY IS CROUSE HOSPITAL AND BARIATRIC AND GENERAL SURGEONS JEFFREY M. DESIMONE, M.D., FACS, AND KENNETH COOPER, D.O.

DRS. DESIMONE AND Cooper recently moved their practice to Crouse Hospital in Syracuse, because the facility supports their patient care mission. Both parties are committed to providing sustainable weight-loss solutions for morbidly obese and obese patients. Crouse Hospital’s new weight-loss surgery program takes a multidisciplinary approach to accomplishing success.

A Look Back
Bariatric surgery has undergone a substantial evolution since the early days of the specialty.

“When the general public may see bariatric surgery as a recent development, surgeons have been researching different versions of gastric bypass surgeries since the 1960s and ’70s, but no methods of standardization were present,” says Dr. DeSimone, Medical Director of the Bariatric Program at Crouse Hospital. “In the ’80s, we saw the rise of ‘stomach stapling,’ but quickly realized this procedure wasn’t very efficient or lasting, and, once again, standardization wasn’t in place. By the late ’90s, gastric bypass was adopted as the standard operation and is still considered the gold standard for bariatric surgery to date. Unlike 20 years ago, however, national societies and organizations exist today, driving research and concurrence on bariatric standardization.”

As the obesity epidemic in the United States continues to reach epic proportions, conventional methods of treatment for the morbidly obese — such as diet and exercise even in strict, rigorous forms — are not succeeding in producing sustainable weight-loss results. Numerous studies have shown that not only do bariatric surgical options promote sustainable weight loss, but they also significantly reduce comorbidities, including diabetes, heart disease and early onset of osteoarthritis. This significant decrease in the risk of developing or reversal of comorbidities among the obese population can have a considerable impact on the nation’s health care spending and savings.

Tailored for Success
At present, three main forms of bariatric surgery continue to be leaders in surgical weight-loss success.

+ Gastric bypass divides the stomach, creating a small pouch for food to bypass the stomach and portions of the small bowel.

+ Gastric banding involves placing a silicone band around the upper portion of the stomach to create a small pouch. The bariatric surgeon has the ability to adjust the band as needed.

+ Sleeve gastrectomy removes a large portion of the stomach, leaving behind a smaller, banana-sized version.

“Many practices tend to pick one of these three bariatric procedures to offer to patients,” says Dr. Cooper. “Dr. DeSimone and I don’t believe in a ‘one size fits all’ practice of bariatric medicine. We’ve taken the time to specialize in performing all three bariatric procedures and tailor each to the specific needs of the patient. We judge each patient on a case-by-case basis to help determine which surgical method is best for him or her.”

Dr. Cooper explains that another important factor in patient success is being an active partner with patients and taking a hands-on approach throughout their weight-loss journeys. Adhering to a multidisciplinary approach to bariatric medicine, the weight-loss surgery program at Crouse Hospital also enlists nutritionists, psychologists and other medical specialists — such as cardiologists, pulmonologists and endocrinologists — to help obtain optimal results as safely and effectively as possible.

Ensuring their patients make regular, long-term follow-up appointments, the physicians encourage their patients to participate in support groups and educational seminars at Crouse Hospital. They also make themselves available to patients to build permanent relationships.

“The bariatric procedures available today are very safe and extremely effective,” says Dr. DeSimone. “If you have an obese patient who’s at risk for or who has comorbidities and isn’t responding to traditional methods of weight loss, consider having him or her evaluated by a bariatric surgeon. There is a subset of individuals who are simply unresponsive to conventional methods of weight loss, not for lack of trying, but because of a physiological change that has occurred in their metabolisms that simply doesn’t allow diet and exercise to produce successful results alone. These individuals could truly benefit from these surgeries and obtain a better quality of life.”

To refer a patient or learn more, visit www.crouse.org/weight-loss-surgery or call (315) 470-7364.

KENNETH COOPER, D.O.
SURGEONS JEFFREY M. DESIMONE, M.D., FACS, AND HANK COPE, D.O.
Researchers here are discovering more than one direct weight-loss benefit associated with sleeve gastrectomy. Because the procedure involves removal of a large portion of the stomach, it also removes the capacity for the stomach to produce ghrelin.

Ghrelin is a naturally occurring stomach hormone. Until the last decade or so, researchers didn’t fully understand the uses and effects of ghrelin in the gastrointestinal process.

“As it turns out, ghrelin acts as an appetite stimulant,” says Jeffrey M. DeSimone, M.D., FACS, bariatric and general surgeon at Crouse Hospital. “It’s essentially a hunger hormone, and not all stomachs produce the same amount.”

Studies have confirmed that stomachs enlarged from overeating tend to produce more of the hormone, and suppressing this production can be very difficult. The only immediate method for reducing overproduction of ghrelin is to remove the part of the body that produces it — the stomach. Sleeve gastrectomy, then, presents a two-for-one approach to weight loss, as it both allows patients to feel satiated sooner and reduces the stomach’s ability to feel hungry.

“We have found that ghrelin is produced mainly in the fundus of the stomach, some of which is removed during a sleeve gastrectomy,” Dr. DeSimone says. “That’s a really exciting idea, and this procedure is gaining more traction because of it.”

**INCREASING BENEFITS**

Studies have shown that a significant number of individuals who received sleeve gastrectomy also have experienced rapid resolution of Type 2 diabetes. In addition, remission of diabetes in nonmorbidly obese patients has also been reported. *DiabetesCare*, a publication of the American Diabetes Association, published an article discussing the potential effectiveness and durability of diabetes control gained after gastrointestinal bypass surgeries. Emerging as possible “metabolic surgeries,” surgical procedures specifically aimed at treating diabetes are currently being studied. One such surgery that has gained lots of attention is sleeve gastrectomy.

While more research and in-depth investigation is needed, the possibilities and benefits of metabolic surgery through bariatric methods as it relates to diabetes treatment remain promising.