Gastric Bypass Beat Medical Care for Moderate Obesity

The investigators found no difference in adverse events between the medical and surgical patients. Eight medical patients could not tolerate orlistat or another medication prescribed as part of their regimen, Dr. O’Brien said. No major surgical complications occurred, but one surgical patient had a transient port infection, and four had to have their bands adjusted because of posterior prolapse. Four medical patients and one surgical patient underwent cholecystectomy for acute cholecystitis.

Participants had to agree to accept randomization before entering the trial; Dr. O’Brien said none were allowed to choose between medical and surgical care. Nonetheless, one man in the surgical group backed out on the eve of surgery, and five medical patients withdrew during the study.

In each case, Dr. O’Brien said the patient’s last clinical measures were carried forward in the intent-to-treat analysis presented at the meeting, which was cosponsored by the American Diabetes Association.

None of the patients met U.S. National Institutes of Health criteria for gastric bypass surgery, which specify that the surgery can be considered in patients who are severely obese (body mass index greater than 40 kg/m²) or in patients with a BMI greater than 35 and high-risk comorbid conditions. The average BMI of the study patients was 33, with a range of 30-35.

A randomized trial would not have been ethical had the patients been more obese, Dr. O’Brien pointed out.

"Ethically, I couldn’t look someone in the eye with a BMI of 36 and say medical therapy might just work as well as surgery," he said, “whereas 30-35 is a gray zone in our thinking.”

In an interview, Dr. O’Brien predicted that the laparoscopic gastric band procedure would be standard for patients with mild to moderate obesity in 5-10 years. First, he said, advocates must balance the costs of surgery against the costs of continuing to treat diabetes and the other conditions that make up metabolic syndrome.

The investigators did not build an economic analysis into this trial, but Dr. O’Brien said they have begun doing such studies. “It frightens administrators to think everybody is going to need to have surgery,” he said. “I think that might be cost effective, though.”

Calcium Loss Documented After Roux-en-Y Gastric Bypass

Las Vegas — Calcium absorption decreases after a third after Roux-en-Y gastric bypass surgery, placing patients in jeopardy of clinically significant bone loss, Claudia Riedt said at the annual meeting of the North American Association for the Study of Obesity.

A prospective study of 19 severely obese women found that average total calcium absorption was 137 mg per day in 17 patients who were examined 6 months after surgery. “This is about 40% below the estimated total amount of calcium required per day to maintain health and balance,” said Ms. Riedt, a doctoral candidate in nutritional sciences at Rutgers University, New Brunswick, N.J.

The investigators undertook the study because osteopenia had been seen in patients after Roux-en-Y gastric bypass. Although the procedure is believed to result in less malabsorption than other bypass procedures, Ms. Riedt and her colleagues theorized that inadequate calcium absorption was a factor along with decreased food intake and weight loss.

The women recruited for the study had a mean age of 45. They entered with an average body mass index (BMI) of 44 kg/m², an average weight of 145 kg, and an average energy intake of 2,466 kcal per day. They consumed a mean of 47% of their calories as fat and 31% as carbohydrates.

By 6 months, the women had lost 104 kg on average and had a mean BMI of 39. Their energy intake had decreased to 840 kcal per day, and their calcium intake had dropped to 829 mg per day, Ms. Riedt said. Not only were they consuming less calcium, but the true fraction of calcium absorbed had decreased by nearly 34%, becoming only 25% of their calcium intake.

The researchers also observed changes in bone turnover markers that are typical with weight loss and suggest that calcium was being mobilized from bone. Estradiol and parathyroid hormone levels correlated with the rate of calcium absorption. Vitamin D levels were relatively low and did not change during the study or predict calcium absorption, Ms. Riedt said.

Two women in the study followed recommendations that patients consume at least 1 g of calcium in daily supplements after the procedure. They increased their total intake by about 1200 mg to 2400 mg and 2600 mg of calcium, respectively. As a result, the average amount of calcium absorbed by all 19 women reached 223 mg per day—closer to but still under the nutritional goal of 240 mg per day.

“Nutritional interventions must compensate for drastically reduced calcium absorption,” Ms. Riedt said at the meeting, cosponsored by the American Diabetes Association. She recommended 1,590 mg per day above dietary intake but acknowledged that compliance can be a problem, especially in the first few months after the procedure.

“All the women were encouraged to take extra calcium. Whether they did was another matter,” she said in an interview.