## Comorbidities Climb After Bariatric Denials

**Major Finding:** Rates of new-onset comorbidities in the denial and bariatric cohorts, respectively, were 9.2% and 0.3% for diabetes; 41.9% and 0.9% for hypertension; and 19.4% and 0.6% for GERD.

**Data Source:** A retrospective study comparing comorbidities in 587 bariatric surgery patients with 189 patients who did not undergo surgery.

**Disclosures:** Dr. Al Harakeh and discussant Dr. John Morton reported having no financial conflicts of interest.

## BY DIANA MAHONEY

FROM THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR METABOLIC AND BARIATRIC SURGERY

LAS VEGAS — Morbidly obese individuals who do not undergo bariatric surgery because of insurance denials have a higher incidence of new comorbidities over a short follow-up than do surgical patients, despite no significant change in body mass index, a study has shown.

Dr. Ayman B. Al Harakeh and his colleagues at Gundersen Lutheran Medical Foundation in LaCrosse, Wisc., compared the natural history and metabolic consequences of morbid obesity for patients who were denied bariatric surgery and those who underwent laparoscopic Roux-en-Y gastric bypass (LRYGB) at their institution in 2001-2007. The researchers found that the 189 patients who were denied the surgery were significantly more likely to develop new comorbidities (including diabetes, hypertension, obstructive sleep apnea, lipid disorders, and gastroesophageal reflux

disease) within a 3-year followup period, despite no change in BMI, compared with the 587 patients in the LRYGB cohort. Patients were denied surgery even though they satisfied National Institutes of Health criteria and were deemed appropriate surgical candidates.

The age and sex of patients in the denial and LRYGB cohorts were similar at baseline, as was the initial median BMI (47.3 kg/m<sup>2</sup> in the denials co-

hort and 48.5 in the surgery group), Dr. Al Harakeh reported. The percentages at baseline of patients with prior diagnosis of comorbidities in the denial and LRYGB groups were as follows: diabetes, 20% of the denial and 25% of the LRYGB groups; hypertension, 51% and 43%, respectively; obstructive sleep apnea, 20% and 22%, respectively; lipid disorders, 34% and 24%, respectively; and GERD, 62% and 49%, respectively, he said.

The statistically significant higher prevalence of hypertension, GERD, and lipid disorders in the denial group placed them at higher risk than the surgical group, "yet they were denied surgery that could improve or resolve many of the their obesity-related complications," Dr. Al Harakeh pointed out.

An assessment of major comorbidities at 36 months after the initial evaluation showed the following rates of new-onset comorbidities in the denial and LRYGB cohorts, respectively: 9.2% and 0.3% for diabetes; 41.9% and 0.9% for hypertension; 34.2% and 0.4% for obstructive sleep apnea; 11.2% and 0.3% for lipid dis-

orders; and 19.4% and 0.6% for GERD, said Dr. Al Harakeh. The respective mean BMIs in the denial and surgery groups at 36 months were 46.8 and 30.5, he said.

Because study data were collected retrospectively, specific reasons for the insurance denials were unavailable, he stated. However, in his experience, denials are frequently arbitrary. In fact, a previous study by Dr. Al Harakeh's colleagues showed that nearly 30% of patients deemed suitable for surgery by the bariatric team in 2001-2005 did not un-

dergo the surgery for insurance-related reasons. According to the investigators, coverage was often denied because the insurer determined that the procedure was not a medical necessity or because the individuals' comorbid conditions were being managed by conventional medicine. "Even though the NIH has clearly defined the criteria for morbid obesity surgery, individual insurers are free to establish their own unique requirements," the authors wrote (Surg. Obes. Relat. Dis. 2007;3:531-6).

## 'Clear and Present Danger' Shown

The high rate of new comorbidity development over a short

follow-up period observed in obese patients denied bariatric surgery for insurance reasons demonstrates "a clear and present danger to at-risk obese patients," according to discussant Dr. John Morton.

Though powerful, the study results may be skewed somewhat by a "surveillance effect," Dr. Morton suggested. "A lot of these patients don't have primary care available to them, or at least

effect," Dr. Morton suggested. "A lot of these patients don't have primary care available to them, or at least not very good primary care," he said, noting that perhaps the extensive presurgery evaluation for bariatric procedures "woke people up about the potential problems that could be occurring." It's rea-

sonable to assume that some of the most prevalent comorbidities ob-

served during the evaluation, such as hypertension, GERD, and sleep apnea, may have been present but undiagnosed previously, he said.

Potential surveillance effect notwithstanding, the findings clearly confirm that failing to intervene "is a recipe for con-

tinued progression of comorbidities in these patients and that bariatric surgery is a powerful tertiary prevention measure for comorbidities."

DR. MORTON is director of bariatric surgery and surgical quality at Stanford Hospital and Clinics in Palo Alto, Calif. He had no financial conflicts to disclose.

## Revision Rates Dim Enthusiasm for Distal Bypass Surgery

BY DIANA MAHONEY

News from the American Society for Metabolic and Bariatric Surgery

LAS VEGAS — Distal Rouxen-Y gastric bypass surgery led to excellent long-term weight loss in superobese and morbidly obese individuals, but researchers found a high incidence of protein-calorie malnutrition requiring revision, in a study of 49 patients. Calling the revision rate "unacceptable," Dr. John M. Kellum said the distal procedure "should not be the primary operation for morbid or superobesity."

Data on long-term outcomes in American patients who have undergone distal gastric bypass are limited. Dr. Kellum and his colleagues at Virginia Commonwealth University, Richmond, evaluated the long-term weight loss and metabolic outcomes of 49 patients who underwent the procedure in 1985-1989 with follow-up of up to 24

years. Of those 49 patients, 43 were classified as superobese (a body mass index greater than 50 kg/m²), and 6 were morbidly obese (BMI greater than 40) at the time of surgery. The mean preoperative BMI for the predominantly female study population was 58.9, and the mean age at surgery was 35.5 years.

All procedures were performed using celiotomy and included a Roux-en-Y gastric bypass with a 30- to 50-mL proximal gastric pouch (stapled in continuity), a biliopancreatic limb extending from the ligament of Treitz to 250 cm from the ileocecal junction, and a common channel of 50-150 cm, Dr. Kellum said. "It should be noted that by 1988, surgeons were no longer doing 50-cm common channels because of the unacceptably high incidence of protein-calorie malnutrition."

One patient died perioperatively from a massive pulmonary embolus. Of the remaining 48 patients, 21 had limb-lengthen-

ing revisions for protein-calorie malnutrition that was not improved by intermittent total parenteral nutrition (TPN), including 13 of the 23 patients with 50-cm common channels and 8 of the 25 patients with common channels greater than 100 cm, Dr. Kellum said. The revision rate difference in the two groups was statistically significant.

Among the 27 patients who did not undergo limb-lengthening revisions, 2 required hospitalization (including 1 who received TPN for 30 days) and 6 received intestinal tube feedings at home. Eight late deaths 6-19 years after surgery occurred in this group, Dr. Kellum noted.

For 19 of the 27 patients who did not need revision surgery, more than 5 years of follow-up data showed "excellent long-term weight loss," with a median BMI of 34.2 at 10 years, said Dr. Kellum. However, the mean levels of serum albumin (3.6 g/dL), iron (24.4 U/dL), and 25-OH vitamin D (14.6 ng/mL)

were "unacceptably low." Because of the small number of patients, the resolution of comorbidities over the long term couldn't be determined, he said.

Compared in a nonrandomized fashion with the long-term outcomes of a similar group of patients who underwent longlimb gastric bypass starting in 1992, "there was superior weight loss but also a statistically higher incidence of iron deficiency anemia in the distal bypass group, and the rates of [decreased] albumin approached significance by the Student's ttest and reached significance using the Wright subtest," Dr. Kellum said (Ann. Surg. 1992; 215:387-95). "Because of the albumin levels, serum calcium was also significantly lower in the distal bypass group.'

Based on the findings, Dr. Kellum said, "This particular form of distal gastric bypass should not be used as a primary bariatric surgery for morbid or superobesity because of the

high revision rate and the high incidence of late metabolic morbidity. Distal Roux-en-Y gastric bypass should be reserved for those patients who have failed conventional proximal gastric bypass [and] who continue to have life-threatening medical conditions."

Dr. Robert E. Brolin of New Jersey Bariatrics in Plainsboro, the discussant, asked Dr. Kellum whether malabsorption has any role in terms of long-term weight-loss maintenance in severe clinical obesity. "I still don't think malabsorption should ever be the initial operation," Dr. Kellum replied.

Disclosures: Dr. Kellum reported having no financial conflicts of interest with respect to his presentation. He noted that one of the study coauthors, Dr. Harvey Sugerman, is editor in chief of Surgery for Obesity and Related Diseases, the journal of the American Society for Metabolic and Bariatric Surgery.