

# Bariatric Surgery Has Advantages in Disabled

BY JEFF EVANS  
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NATIONAL HARBOR, MD. — Disabled Medicare patients who undergo bariatric surgery may have higher operative mortality and a greater rate of complications than those outside of the federal program, but these risks appear to be counterbalanced by a substantial improvement in health, according to a single-center, retrospective study.

Perceptions of the risks and benefits of bariatric surgery in Medicare patients (or older patients in general) have tipped back and forth in various studies since 2004, when a report found that patients older than 55 years had elevated 30-day mortality from the procedures, especially at low-volume centers (Ann. Surg. 2004;240:586-93), said Dr. James W. Maher of the division of general surgery at Virginia Commonwealth University (VCU), Richmond.

At the annual meeting of the American Society for Metabolic and Bariatric Surgery, Dr. Maher reviewed the results of bariatric procedures performed at VCU during 1981-2006. Prior to 1999, most bariatric procedures at VCU consisted of open Roux-en-Y gastric bypass (RYGB) or vertical banded gastroplasty. Since then, the university's surgeons have performed mostly laparoscopic RYGB and a small number of laparoscopic adjustable gastric banding procedures.

Dr. Maher and his coinvestigators compared the outcomes of 282 Medicare patients with those of 3,169 non-Medicare patients.

All but 27 of the Medicare patients were on disability. Of the 282 Medicare patients, 175 had received open RYGB

and 107 had received laparoscopic RYGB.

Compared with non-Medicare patients at baseline, Medicare patients had a significantly higher mean age and mean body mass index, as well as significantly higher rates of hypertension, diabetes, obstructive sleep apnea, and obesity-hypoventilation (pickwickian) syndrome, according to Dr. Maher.

Among all patients, those with Medicare coverage lost a significantly lower percentage of excess weight than did those who were not covered by Medicare (60% vs. 66%, respectively). Hypertension resolved more often among non-Medicare patients than among Medicare patients (65% vs. 49%), but diabetes resolved at similar rates between the groups (77% vs. 65%).

Men in both groups lost a similar percentage of excess weight, and diabetes resolved at similar rates (30% for Medicare vs. 23% for non-Medicare). But hypertension was resolved in 56% of men with Medicare coverage, compared with 30% of men not covered by Medicare, a significant difference.

Mortality at 30 days was significantly higher among Medicare patients than among non-Medicare patients (2.5% vs. 0.8%). There was an even greater disparity in mortality between male Medicare patients than male non-Medicare patients (5.6% vs. 1.5%). Of the 27 Medicare patients not on disability, no one older than 65 years died.

Compared with non-Medicare patients, those who were covered had a slightly higher rate of anastomotic leak but a lower rate of pulmonary embolism, possibly because they had a higher rate of preoperative insertion of inferior vena cava filters, Dr. Maher said. ■

## Sleeve Gastrectomy May Trump Gastric Banding in the Short Term

PHILADELPHIA — Morbidly obese patients who undergo laparoscopic sleeve gastrectomy may lose significantly more weight in a shorter time period than those who undergo laparoscopic adjustable gastric banding, according to a retrospective study of 123 patients.

Both groups had similar rates of complications, although sleeve gastrectomy patients had a significantly longer mean operative time (169 minutes vs. 122 minutes) and mean length of stay in the hospital (2.5 days vs. 1.2 days) than did patients who underwent banding, Dr. Scott Q. Nguyen reported in a poster session at the annual meeting of the Society of American Gastrointestinal and Endoscopic Surgeons.

Dr. Nguyen and his colleagues at Mount Sinai Medical Center, New York, reviewed patients in their early to mid-40s (about three-fourths of whom were women) undergoing the procedures at one center during 2003-2007. Of the 123

patients studied, 49 had sleeve gastrectomy and 74 underwent laparoscopic adjustable gastric banding.

The mean body mass index values between the two groups were significantly different at both preoperative and postoperative measurements. For sleeve gastrectomy patients, the mean BMI dropped from 52 to 44 kg/m<sup>2</sup>, compared with a decrease from 43 to 38 kg/m<sup>2</sup> in banding patients. Sleeve gastrectomy recipients had a mean of 6 months of follow-up, vs. 8 months for banding patients.

Significantly greater values for mean weight loss and mean percentage of excess weight loss were recorded for the sleeve gastrectomy patients than for the banding patients (58 vs. 33 pounds and 30% vs. 25%, respectively).

Overall, there were 6 complications in the sleeve gastrectomy patients and 12 complications in the banding patients.

—Jeff Evans

# Pouch Emptying After Bypass May Predict Weight Loss

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PHILADELPHIA — Patients with slow or no gastric pouch emptying on an upper GI study 1 day after undergoing laparoscopic Roux-en-Y gastric bypass may have less weight loss at 1 year than would patients with normal, prompt pouch emptying, according to a prospective study of 405 patients.

The study's findings could add another reason to perform a routine upper GI procedure, Dr. Ehab A. El Akkary said at the annual meeting of the Society of American Gastrointestinal and Endoscopic Surgeons.

On evaluation, some gastric bypass patients show no or very slow emptying of contrast agent from the gastric pouch to the Roux limb of the jejunum, while others show fast emptying.

Dr. El Akkary and his associates conducted a prospective study of 405 patients who underwent laparoscopic Roux-en-Y gastric bypass (LRYGB) performed by one surgeon with a linear stapler technique during 2002-2006. All patients underwent an upper GI study on postoperative day 1.

Of 304 patients with 1 year of follow-up, 188 had normal, prompt pouch emptying and 116 had slow or nonemptying pouches, said Dr. El Akkary, a fellow in the gastrointestinal surgery division at Yale University, New Haven, Conn.

At 1 year after LRYGB, patients with prompt pouch emptying lost significantly more weight than did patients with delayed pouch emptying (111 pounds vs.

104 pounds), and had a lower mean body mass index (31.7 vs. 35.6 kg/m<sup>2</sup>) and less overall weight (195 pounds vs. 223 pounds) than did those with delayed emptying.

The gastric pouches were roughly the same size in the two groups, Dr. El Akkary said. None of the patients required dilation or a reoperation, and none had dumping syndrome.

Because the two groups were similar in terms of age, operative time, length of hospital stay, and initial weight and BMI, Dr. El Akkary and his colleagues noted that an increase in peptide YY might explain the findings. Peptide YY is known to reduce appetite in response to eating. Although no hormonal data are available to support this hypothesis, the next phase of the study will measure the level of peptide YY to "see if it can explain this discrepancy in weight loss," said Dr. El Akkary, who reported having no conflicts of interest.

An audience member cautioned that although the data were intriguing, the actual difference in weight loss was small and the size of the pouch may have changed over the course of the year. Dr. El Akkary agreed that the lack of a repeat upper GI procedure at 1 year was a limitation of the study, adding that it would be especially helpful in detecting patients with slow gastric emptying caused by edema at the gastrojejunostomy.

The investigators did not measure the patients' preoperative rate of gastric emptying, but another audience member suggested that it would be "very important because it could be predictive of outcome." ■

**Patients with prompt pouch emptying lost significantly more weight than did patients with delayed pouch emptying, and had a lower mean BMI.**

## Vitamin D Deficiency After Gastric Bypass Predicted by Preop Levels

SAN DIEGO — Several preoperative factors—a longer bypass limb length, low vitamin D levels, and African American ethnicity—were significant predictors of postoperative vitamin D deficiency in a study of 145 patients undergoing gastric bypass surgery.

Vitamin D deficiency can place such patients at increased risk for calcium and parathyroid hormone (PTH) abnormalities, and identifying the deficiency prior to surgery allows clinicians to intervene, Dr. Judy Jin wrote in a poster presented at the annual Digestive Disease Week.

Dr. Jin, of the department of surgery at Case Western Reserve University in Cleveland, and her colleagues reviewed data from 145 patients who underwent Roux-en-Y gastric bypass surgery between January 2005 and October 2006. The average age of the patients was 44 years, and the average BMI was 49 kg/m<sup>2</sup>. Most of the patients (86%) were women, and 23% were African American.

The researchers tracked patient demographics and the laboratory values of calcium, vitamin D, and parathyroid hormone at 3-month intervals for 1 year. Overall, 42% of the patients had vitamin D deficiency (defined as vitamin D levels less than 20 ng/mL) either before surgery or during the 1-year follow-up period.

In a multivariate analysis, patients with postoperative vitamin D deficiency had significantly lower preoperative vitamin D levels than did those who didn't have postoperative deficiency (19.9 ng/mL vs. 30.0 ng/mL). Patients with postoperative vitamin D deficiency also were significantly more likely to have had a longer limb bypass (165 cm) vs. a short limb bypass (75 cm) and to be African American vs. another ethnicity. Preoperative PTH levels, age, sex, or reduction in BMI had no apparent effect on postoperative vitamin D.

Dr. Jin reported that she had no conflicts to disclose.

—Heidi Splette