Comorbidities Cut From Gastric Banding in Teens

BY BRUCE JANCIN

FAJARDO, PUERTO RICO — Laparoscopic adjustable gastric banding for morbidly obese adolescents achieves marked improvement or outright resolution of the major obesity-related metabolic abnormalities, according to an interim analysis of a prospective study.

The ongoing study was mandated by the Food and Drug Administration as a condition of the Investigational Device Exemption granted for laparoscopic adjustable gastric banding (LAGB) in adolescents. The proprietary LAP-BAND device (Allergan Inc.) utilized in the study is approved for patients who are at least 18 years old but remains investigational in younger patients, Dr. Ai-Xuan L. Holterman said at the annual meeting of the American Pediatric Surgical Association.

Dr. Holterman made it clear she considers LAGB an important element in a comprehensive behavioral treatment program for adolescent morbid obesity.

"Let me remind everybody: we think obesity is a chronic, incurable disease," said Dr. Holterman of Rush University Medical Center, Chicago. "The laparoscopic band bariatric option can be offered for early treatment of morbid obesity, first to arrest the relentless progression of obesity and to avoid delayed treatment of the serious obesity-related comorbidities, and also to facilitate early acquisition of a healthy lifestyle."

She reported on 20 morbidly obese patients, aged 14-17 years, who underwent LAGB with 18 months of prospective follow-up. Another five teens underwent the surgery during the same period but were not included in the study because insurance or transportation issues prevented them from participating in the full treatment program.

The subjects' mean baseline body weight was 296 pounds, which was 178 pounds over their ideal weight. Their mean body mass index was 50 kg/m2.

Weight loss averaged 43, 55, and 63 pounds, respectively, at 6, 12, and 18 months post LAGB surgery. Patients lost

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DR. HOLTERMAN

26% of their excess weight at 6 months, 34% at 12 months, and 41% at 18 months.

At baseline, 35% of the teens were hypertensive, 80% dyslipidemic, 90% had insulin resistance, 95% met criteria for metabolic syndrome, 90% had histologic evidence of nonalcoholic steatohepatitis, and 75% had poor quality of life as assessed using the Pediatric Quality of Life Inventory. Marked improvements in all areas were documented as early as 6 months post LAGB.

By 12 months, 42% of teens with poor quality of life baseline scores had normal-range scores in the domains of social and physical functioning, as well as peer relations, as did 63% by 18 months.

One-third of teens who were hypertensive at baseline were normotensive by 6 months, and all were normotensive at 12 and 18 months. Insulin resistance was normalized in 39% of affected patients at 6 months, 45% at 12 months, and 72% at 18 months. Dyslipidemia resolved in 37% of affected teens at 6 months, 46% at 12 months, and 67% at 18 months. As a result of these improvements, metabolic syndrome resolved in 37% of affected patients at 6 months, 63% at 12 months, and 82% at 18 months.

LAGB is a minimally invasive, reversible, restrictive procedure that connects a balloon to a band wrapped around the upper part of the stomach. The gastric band's tightness is adjusted through balloon inflation controlled via a reservoir placed under the skin and accessed through an abdominal port.

Two of the five teens with a loss of less than 20% of their excess body weight at 12 months showed normalization of their dyslipidemia and metabolic syndrome, Dr. Holterman noted.

She reported that neither she nor her coinvestigators have any financial relationships with industry. ■