



Prevention

GASTRIC BANDING RESOLVES METABOLIC SYNDROME IN OBESE SUBJECTS OVER FIVE YEARS OF FOLLOW-UP

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Prevention: Metabolic Syndrome

Abstract Category: 24. Prevention: Clinical

Presentation Number: 1102-14

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Background: Obesity and the metabolic syndrome (MS) are independent risk factors for cardiovascular disease. Bariatric surgery is employed to reduce weight and associated comorbidities. There is a lack of data on the long-term durability of metabolic changes associated with bariatric surgery, in particular with laparoscopic gastric banding (LAGB).

Methods: 50 patients with BMI between 30 and 40 underwent LAGB at a single center and were followed annually for 5 years. At follow-up visits, subjects underwent a physical exam and blood sampling. The primary outcome was diagnosis of MS. Secondary outcomes included individual components of the MS and proportions of subjects using oral hyperglycemic or anti-hypertensive agents.

Results: 47 patients (45 female, mean age 43.8 years) completed 5 years follow-up. Baseline BMI was 35.1 ± 2.6 . Subjects exhibited mean weight loss of 22.3 ± 7.9 kg ($22.9 \pm 7.4\%$) at year 1 and maintained this weight loss ($19.8 \pm 10.2\%$) through 5 years of follow-up. At baseline, 43% of subjects met NCEP ATP III criteria for MS. This was reduced to 15% at year 1 and remained decreased throughout 5 years of follow-up (Figure). There were reductions in the proportion of subjects meeting each secondary outcome measure ($p < 0.001$ - $p = 0.05$) throughout 5 years of follow-up.

Conclusion: LAGB produces significant weight loss, resolution of MS by improvement in multiple diagnostic criteria, and reduces use of hyperglycemic and anti-hypertensive agents. These changes persist over 5 years following surgery.

