Editors' Comment: Bariatrics and Diabetes Meta-Analysis

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An article titled Weight and Type 2 Diabetes after Bariatric Surgery: Systematic Review and Meta-analysis was published in the March issue of *The American Journal of Medicine* [1]. This paper is the largest, current, comprehensive meta-analysis of this subject.

The authors expanded the database from the 2004 meta-analysis [2] to 621 studies with 888 treatment arms and 135,246 patients. At baseline, the mean age was 40.2 years, body mass index (BMI) was 47.9 kg/m², 80% were female, and 10.5% had previous bariatric procedures. Meta-analysis of weight loss overall was 38.5 kg or 55.9% excess body weight loss. Overall, 78.1% of diabetic patients had complete resolution and diabetes was improved or resolved in 86.6% of patients. Weight loss and diabetes resolution were greatest for patients undergoing biliopancreatic diversion/duodenal switch, followed by gastric bypass, and least for

banding procedures. Insulin levels declined significantly postoperatively, as did hemoglobin A1c and fasting glucose values. Weight and diabetes parameters showed little difference at less than 2 years and at 2 years or more.

There should be little doubt that today metabolic/bariatric surgery is the most effective and lasting means of treating type 2 diabetes in the morbidly obese, and, possibly, in patients with a BMI ≤ 35 kg/m².

References

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2. Buchwald H, Avidor Y, Braunwald E, et al. Bariatric Surgery: A systematic review and meta-analysis. *JAMA.* 2004;292:1724–37.

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