



## Highlighted Abstract

### ***Comparing Diabetic Outcomes in Patients with Diabetes Mellitus Type 2 and BMI 30-35 kg/m<sup>2</sup> Undergoing Bariatric***

#### ***Surgery vs. Medical Management: A Systematic Review and Meta-Analysis***

##### **Abstract Body:**

##### **Background:**

Bariatric surgery has been shown to improve diabetic outcomes in patients with BMI over 35 kg/m<sup>2</sup> even before significant weight loss occurs. The surgery itself may be a significant contributor to this improvement and could have a similar effect on patients with BMI under 35 kg/m<sup>2</sup>. This study compared the diabetic outcomes in patients with type 2 diabetes (T2D) and BMI 30-35 kg/m<sup>2</sup> undergoing surgical versus medical management.

##### **Methods:**

PubMed, CINAHL, Embase, and Cochrane databases were queried using established search strategies and inclusion/exclusion criteria. Resulting titles, abstracts, and full texts were screened by two independent reviewers. Random effects model meta-analysis was performed on all studies with one year time points.

##### **Results:**

Systematic review produced 28 studies overall and 15 studies with one year follow up data. Most studies assessed for differences in A1c, BMI, fasting plasma glucose (FPG), systolic blood pressure (SBP), and LDL. The majority of studies revealed significantly lower post-intervention A1c (93%), BMI (96%), and FPG (77%) in surgery patients versus medical patients. At one year, meta-analysis demonstrated significantly lower A1c (mean difference -1.08%, 95% CI -1.56, -0.59), BMI (mean difference -3.49 kg/m<sup>2</sup>, 95% CI -6.78, -0.19), and FPG (mean difference -26.62 mg/dL, 95% CI -40.42, -12.82). There were no significant differences in SBP or LDL.

##### **Conclusions:**

In patients with T2D and BMI of 30-35 kg/m<sup>2</sup>, surgical management resulted in significantly lower A1c, FPG, and BMI at one year when compared to medical management. Patients with T2D and BMI 30-35 kg/m<sup>2</sup> should be considered for bariatric surgery.

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