

Bariatric Surgery and Type 2 Diabetes Mellitus: Surgically Induced Remission

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Abstract

The relationship between obesity and type 2 diabetes mellitus (T2DM) is well known. Morbidly obese patients with T2DM who undergo bariatric surgery have improvement or remission of their diabetes. Different types of bariatric operations offer varying degrees of T2DM remission. These operations are classified as restrictive, malabsorptive, or a combination of both. The gold-standard operation, known as the Roux-en-Y gastric bypass, is a combination operation.

Most often, improvement of the diabetes is seen within days of the operation. Various theories to explain this rapid change include calorie restriction and hormonal changes from exclusion of the upper gastrointestinal tract. Weight loss accounts for the sustained improvements in glucose control. The patients who benefit the most are those who are early in their disease course.

Having a single treatment for both obesity and T2DM is ideal. As bariatric surgery has become a safe operation when performed by experienced surgeons, it should be considered a treatment for these diseases. The impact it can have on the lives of individual patients and society as a whole is tremendous.

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Abbreviations: (BMI) body mass index, (BPD) biliopancreatic diversion, (GIP) gastric inhibitory peptide, (GLP-1) glucagon-like-peptide-1, (HbA1c) hemoglobin A1c, (JIB) jejunoileal bypass, (LAGB) laparoscopic adjustable gastric band, (RYGB) Roux-en-Y gastric bypass, (T2DM) type 2 diabetes mellitus, (VGB) vertical banded gastroplasty

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