

Treatment of Diabetes Prior to and after Bariatric Surgery

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Abstract

The number of patients undergoing bariatric surgery for morbid obesity is increasing. Type 2 diabetes is common among patients undergoing bariatric surgery. The effect of bariatric surgery on glycemia is profound in patients with diabetes and might vary between different bariatric surgical procedures. Therefore, almost invariably, there is a need to adjust antidiabetic drug dosages in the postoperative period in order to prevent hypoglycemia.

Moreover, preoperatively, very low calorie diet protocols are applied in many centers to facilitate surgery by reducing liver volume. Because low caloric intake will increase insulin sensitivity, there is also a need for dose adjustments of glucose-lowering drugs during this period as well. Guidelines for adjustments of antidiabetic treatment before and after bariatric surgery are scarce. In this article, an overview of different bariatric surgical procedures as well as their effects on diabetes are presented. Recommendations on the perioperative antidiabetic treatment are proposed.

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Abbreviations: (BMI) body mass index, (BPD) bilopancreatic diversion, (BPD-DS) bilopancreatic diversion with duodenal switch, (GLP-1) glucagon-like peptide-1, (HbA1c) hemoglobin A1c, (NPH) neutral protamine Hagedorn, (RYGB) roux-en-Y gastric bypass, (SOS-study) Swedish Obese Subjects Study, (T2DM) type 2 diabetes, (VLCD) very low calorie diet

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