Results of Sleeve Gastrectomy in Type 2 Diabetic Patients; A Retrospective Cross-Sectional Study

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Abstract

Background: Obesity is a preventable and treatable disease with daily exercise and healthy dietary lifestyle interventions that predisposes to many diseases. Sleeve gastrectomy is a partial gastrectomy, in which the majority of the stomach is removed.

Aim: Herein our aim was to investigate the effect of bariatric surgery on glycemic control, blood pressure and serum cortisol levels in morbidly obese patients with type 2 diabetes mellitus (DM).

Material and Methods: 107 type 2 DM patients who had undergone sleeve gastrectomy at Adıyaman University Medical Faculty and whose body mass index was 40 were enrolled in this present study. Patients' age, gender, pre-operative

and 1-year post operative HbA1c, Body Mass Index, serum cortizol, blood pressure, usage of the anti-diabetic and antihypertensive drugs and postoperative complications were documented retrospectively from the records of the patients. Results: The mean age of the patients was $39.7 \pm$ 9.8. Of the patients 32 were male and 75 were female. The mean body mass index of the patients was 46.6 ± 3.8 . A statistically significant decrease in HbA1c, body mass index and serum cortisol levels was observed at 1 year after operation (p value <0.01) when compared with values before operation. Bleeding occurred in 9.3% of the patients, leakage was found in 0.9% of the patients, infection was found in 0.9% of the patients and no complication was detected in

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88.8% of the patients after operation.

Conclusions: In this present study, it was found that sleeve gastrectomy in appropriate indication had a high success rate in the morbidly obese type 2 DM patient group.

Keywords: Obesity, Sleeve Gastrectomy, Diabetes Mellitus