Preliminary Case Report on the Change in Metabolic Profile in Non-Obese Type 2 Diabetic Patients treated with Surgery in the Philippines

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Background: The metabolic effects of bariatric surgery, particularly the remarkable resolution of Type II DM are well established. Several mechanisms of action have been proposed in addition to weight loss as the major factor causing such improvement in co-morbidities. The aims of this presentation are as follows: 1. To describe a novel procedure, the Laparoscopic Sleeve Gastrectomy with Loop Duodeno-Jejunal Bypass; and 2. To present the observed changes in metabolic panel in 3 patients before and after Metabolic Surgery.

Methods: From January 1, 2008 to December 31, 2010, three (62 and 56 y/o females, and a 43 y/o male) non-obese patients with medically uncontrolled Type 2 Diabetes Mellitus underwent Laparoscopic Sleeve Gastrectomy with Loop Duodeno-Jejunal Bypass. Preoperative profile was taken and compared to 1, 3, 6, 12 and 24 months.

Results: All 3 patients had 3 months follow-up data, 2 had 6 and 12 months follow-up data and 1 had 2 years follow-up data. Decrease in BMI ranged from 1-3 kg/m². Improvement of FBS, HbA1c was noted as immediate as 1 month postoperatively with discontinued Oral Hypoglycemic medication and Insulin as early as 3 months after surgery. No surgical morbidities were noted.

Conclusion: Laparoscopic Sleeve Gastrectomy with Loop Duodeno-Jejunal Bypass can be performed safely. There are multiple mechanisms for its euglycemic effect, a subject for further investigation.

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