The Feasibility: SILS port Roux-en-Y Gastric Bypass for Low BMI Diabetes Mellitus

<sup>1</sup>Bariatric & Metabolic International Surgery Center, E-Da Hospital, Taiwan <sup>2</sup>International Minimally Invasive Surgery Training Center <sup>3</sup>General Surgery Chih-Kun Huang<sup>1, 2, 3</sup>, Chi-Hsien Lo<sup>1, 3</sup>

Background: Single Incision Laparoscopic Surgery has been expanded to bariatric surgery. Laparoscopic Roux-en-Y gastric bypass is already accepted as one of the most effective procedure for the treatment of type 2 diabetes mellitus. Hereby, we described our experience using SILS Port to performed Roux-en-Y gastric bypass in nine patients with type 2 diabetes mellitus patients. Methods: After getting approval of E-Da Institutional Review Board, 9 cases with diagnosis of Type 2 Diabetes Mellitus patients with low body mass index (BMIless than 30) underwent Roux-en-Y gastric bypass using the SILS Port from August 2010 to November 2010. Standard Roux-en-Y gastric bypass was performed with 25ml of gastric pouch, 100cm of alimentary and biliopancreatic limb. Results: Four female and five male patients with mean BMI 27.15 and average of diabetes history of 10.2 years, underwent SILS Port Roux-en-Y gastric bypass. Novel liver suspension technique was performed in all patients. Mean operation time was 135 min. And two patients needed additional trocars intra-operatively, related to the difficulty in the dissection of gastric pouch and gastrojejunostomy suture. There was no surgical complication or mortality. At the first month postoperatively, mean AC sugar dropped from 198mg/dL to 116. 1mg/dL, and mean HbA1c decreased from 9.71% to 8. 18%. Conclusion: Laparoscopic Roux-en-Y Gastric Bypass with SILS Port is feasible and reproducible, but should be performed under strict indication and by an experienced surgeon. Even in low BMI patients, it showed high technical skill demands, increased operation time and high conversion rate.