



Western Surgical Association 2020 Annual Meeting

Monday, November 9, 2020
4:00pm – 6:15pm Pacific Time
– Virtual Meeting --

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P 2. MINIMALLY INVASIVE ILEAL POUCH ANAL ANATOMOSIS FOR PATIENTS WITH OBESITY. A PROPENSITY SCORE MATCHED ANALYSIS.

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Background: Obesity surgery is a major risk factor for pelvic infection after Ileal Pouch Anal Anastomosis (IPAA) and even failure of pouch surgery completion. However, a little is known about the impact of minimally invasive surgery (MIS) on the short term outcomes after IPAA for patients with obesity. This study aims to assess the short term post-operative outcomes for patients undergoing MIS IPAA between obese and nonobese patients.

Methods: All adult patients (≥ 18 years old) who underwent MIS IPAA and reported in the American College of Surgeons National Quality Improvement Program (ACS-NSQIP) Participant User Files 2007 to 2018 were included. Patients were divided according to their body mass index (BMI) into two groups (Obese; BMI ≥ 30 kg/m² and nonobese; BMI < 30 kg/m²). Baseline demographics, preoperative risk factors such as comorbidities, American Society of Anesthesiologist Class, smoking, preoperative laboratories, and operation time were compared between the two groups. A propensity score matching analysis (1:1) based on logistic regression with a caliber distance of 0.2 of the standard deviation of the logit of the propensity score has been used to overcome biases due to different distributions of the covariates. Thirty-day postoperative complications including overall surgical, and medical complications, surgical site infection (SSI), organ space infection, systemic sepsis, 30-day mortality, and length of stay were compared between both groups.

Results: Initially, a total of 2,158 patients (402 (18.6%) obese and 1,756 (81.4%) non obese) identified. After 1:1 matching, 402 patients remained in each group. Patients with obesity found to have a higher risk of postoperative organ/space infection (12.9%; vs 6.5%; p-value 0.002) compared to nonobese patients. There was no difference between the groups regarding the risk of postoperative sepsis, septic shock, need for blood transfusion, wound disruption, superficial SSI, deep SSI, respiratory, renal, major adverse cardiovascular events, venous thromboembolism, 30-day mortality, and length of stay.

Conclusion: Patients with obesity undergoing MIS IPAA have a higher risk (~double) of organ space infection compared to nonobese patients. Therefore, loss of weight before MIS IPAA is recommended. Further studies are needed to assess the differences in the risk of organ space infection for patients with obesity undergoing IPAA between robotic and laparoscopic approach.