

**EP178****Effectiveness and stability of robot-assisted anastomosis on minimally invasive pancreaticoduodenectomy**Tae Ho HONG\*, **Sung Eun PARK***Hepato-Biliary and Pancreas Surgery, Seoul St. Mary's Hospital, Korea*

**Introduction :** Reconstruction using robot in pancreaticoduodenectomy (PD) was expected to be an effective means to overcome the limitation of laparoscopic surgery. To our knowledge, a few comparative reports exist on the outcomes of totally laparoscopic pancreaticoduodenectomy (TLPD) and robot-assisted laparoscopic pancreaticoduodenectomy (RLPD). This retrospective study aimed to analyze the surgical results of TLPD and RLPD in a high-volume pancreatic center.

**Methods :** We analyzed surgical results on consecutive patients between January 2016 and May 2020 who underwent minimally invasive pancreaticoduodenectomy (MIPD) for malignant or benign periampullary lesions. Forty-three patients of TLPD and 49 patients of RLPD were enrolled.

**Results :** There were no significant differences in demographics characteristics between the two groups except tumor size, which was significantly larger in the RLPD group than in the TLPD group (mean 3.1cm vs. 2.5 cm,  $p = 0.035$ ). RLPD had the shorter whole operative time (mean 400.4 min vs. 352.2 min,  $p = 0.003$ ) and the shorter anastomosis time than TLPD (mean 94.5 min vs. 54.9 min,  $p < 0.001$ ). There was no significant difference between the two groups in the rate of pancreatic fistula, morbidity, and mortality. But a significantly lower rate of wound infection was found in the RLPD group relative to the TLPD group (0% vs. 9.3%,  $p = 0.038$ ).

**Conclusions :** RLPD shows the advantage of reducing the operation time compared to TLPD as well as technical feasibility and safety.

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