HBP SURGERY WEEK 2021 VIRTUAL &ONSITE
MARCH 25-27, 2021 GRAND WALKERHILL HOTEL, SEOUL, KOREA
www.khbps.org
& The 54th Annual Congress of the Korean Association of HBP Surgery
The Korean Association of Hepato-Biliary-Pancreatic Surgery

# EP189

# Current Trends of types of pancreatoduodenectomy focusing on the role of robot assisted pancreatoduodenectomy

**Youngmin HAN**, Jin-Young JANG*, Jae Seung KANG, Hee Ju SOHN, Mee rang LEE, Hongbeom KIM, Wooil KWON

*Surgery and Cancer Research Institute, Seoul National University College of Medicine, Korea*

**Introduction** : Pancreatoduodenectomy(PD) is the most challenging abdominal surgery. In spite of the popularization of laparoscopic procedures for most GI surgery, laparoscopic PD is not so widely spread. Recently, robotic PD has gained popularity due to many merits. So we investigated current trends of types of PD and the clinical role of robotic surgery.

**Methods** : Between 2015 and 2020, a total of 1263 PD was performed. 929 patients underwent open PD, and 334 underwent robotic PD. Demographics and surgical outcomes were analyzed according to the time period, and propensity score-matched(PSM) analysis was performed to evaluate complications and oncologic outcomes.

**Results** : Patients undergoing robotic PD were younger(63.7 vs. 65.2years, P=0.035); however, no significant difference was observed in sex(P=0.152) and BMI(P=0.742). Robotic PD patients were more likely to have the benign disease(30.2%) than those who received open surgery(13.7%). Robot PD has gradually increased from 6.3% to 71.6%. Operation time was longer in the robot group (338.8 vs. 296.5 min, P<0.001); however, estimated blood loss did not significantly differ (473.5 vs. 429.2 mL, P=0.335). Overall complication (18.6% vs. 17.9%, P=0.843) and CR-POPF rates (9.9% vs. 8.4%, P=0.478) were similar. The hospital stay was shorter in robot PD (10.9 days) than open PD (15.3 days). After PSM analysis, no significant difference of morbidity and survival outcome in cancer patients was observed.

**Conclusions** : The number of robot PD has markedly increased in a relatively short time showing comparable morbidity/mortality and oncologic outcome. Considering better recovery and cosmetic outcomes, robot PD has become one of standard surgical methods in pancreatic surgery.

Corresponding Author. : **Jin-Young JANG** ( jangjy4@gmail.com )

Presenter : **Youngmin HAN** ( vickijoa@gmail.com )