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Step By Step On The Long Way For Minimal Invasive PPPD As An Inexperienced Surgeon

Ji Hoon JO¹, Hyung Hwan MOON^{*1}, Young-II CHOI¹, Dong Hoon SHIN¹

¹*Surgery, Kosin University College Of Medicine, REPUBLIC OF KOREA*

Background : Laparoscopic (PP) PD is one of the high-level surgery that requires long, complicated and difficult techniques. As a hepatobiliary surgeon who starts the surgery, it is difficult because of less chance or experience of the surgery. This study reviewed the learning process and the four cases attempted to do laparoscopic PPPD as a hepatobiliary surgeon who starts the surgery.

Methods : Between March 2017 to March 2021, we reviewed age, gender, diagnosis, BMI, operation time, estimated blood loss during surgery, and pancreatic anastomosis leakage of patients who performed PD or PPPD retrospectively. We had no experience with laparoscopic (PP) PD, but we trained laparoscopic PPPD through other laparoscopic similar procedures. The relevant knowledge was also acquired through YouTube surgery video (open source), the book of HBP Master Surgery (including video clips), KMIPS live surgery.

Results : From March 2017 to March 2021 there were a total of 20 patients who performed PPPD or PD, of which in 17 cases, except for three cases of combined organ or vessel resection. There were no differences in age, body mass index, diagnosis, blood loss, pancreatic anastomosis leakage and hospital days between the two groups. The surgical time was significantly longer for laparoscopic patients. When analyzing four laparoscopic cases, patients 1 and 2 performed a duct to mucosa (Cattel-Warren technique) anastomosis through upper midline mini-laparotomy. But, grade 2 pancreatic anastomosis leakage had happened to patient 2. so we changed to bullumgart style to patients 3 and 4 under totally laparoscopic surgery. The amount of blood loss and the operation time showed improvement over time, but it still took considerable time.

Conclusions : Laparoscopic PPPD required a long time in learning and surgery for surgeon who had no experience. However, educational programs, academic videos and SNS videos are considered beneficial opportunities to learn complex and difficult minimally invasive surgery.

Corresponding Author : **Hyung Hwan MOON** (ras99m@naver.com)