HBP SURGERY WEEK *2023*

MARCH 23THU **- 25** SAT**, 2023** | BEXCO, BUSAN, KOREA
www.khbps.org

& The 58th Annual Congress of
the Korean Association of HBP Surgery

The Korean Association of
Hepato-Biliary-Pancreatic Surgery

ABST-0419

Clinical Efficacy Of Robotic Duct-to-mucosa Pancreaticojejunostomy Simulation Using Silicone Models For Training Surgical Fellows

<u>Mirang LEE</u>, Hye-Sol JUNG, Won-Gun YUN, Youngmin HAN, Wooil KWON, Jin-Young JANG*

Department Of Surgery And Cancer Research Institute, Seoul National University College Of Medicine, REPUBLIC OF KOREA

Background : In the era of minimal invasive surgery (MIS), robotic pancreatoduodenectomy (PD) is being actively performed. Although clinical fellows who need to perform surgery in the MIS era need to thoroughly prepare the MIS-PD during the training process, there are obstacles regarding patient safety and lack of time in the actual operating room. Pancreaticojejunostomy (PJ) anastomosis is one of the difficult anastomosis that requires repetitive practice. This study evaluated the effect of simulation-based training of robotic duct-to-mucosa PJ using the pancreas and intestine silicone models with the scoring system.

Methods : Three pancreatobiliary clinical fellows, who completed basic robot training course and open PJ course with silicon model but never performed real robotic PJ, were participated. The master video was created by a senior surgeon who has performed over 300 robotic pancreatoduodenectomies. Each trainee who was well acquainted with this video carried out the PJ procedures nine times and three pancreatobiliary surgeons assessed the videos and analyzed the scores.

Results : The mean robotic PJ time of 3 trainees was 38.7 minutes in the first video and 32.8 minutes in the ninth video. The mean score was 11.8 (range, 5-19) at the first video, and 17.5 (range, 15-20) at the ninth video. The PJ time showed a decreasing trend, and the test score showed an increasing trend.

Conclusions : This robotic education system would help the pancreatobiliary trainees to overcome the learning curves efficiently and quickly without ethical issues related with the animal models or direct practice to human subject. It will be of practical help to trainees preparing for MIS-PD.

Corresponding Author : **Jin-Young JANG** (jangjy4@snu.ac.kr)