Topic : Biliary & Pancreas

NAVIGATING THE INTRICACIES OF ROBOTIC PYLORUS-PRESERVING PANCREATICODUODENECTOMY WITH THE SP DAVINCI SYSTEM

Hyung Sun KIM¹, Jin Hong LIM¹

¹ Surgery, Gangnam Severance Hospital, Yonsei University, Republic of Korea

Background : The SP daVinci system represents a significant advancement in this field, offering a single-port approach that minimizes invasiveness while maintaining the benefits of robotic surgery. Despite the minimally invasive advantages, the SP daVinci system is a relatively new technology and has not yet been widely reported as capable of handling very complex and difficult surgeries. This study addresses the technical issues in the early experience encountered during robotic pylorus preserving pancreaticoduodenectomy (RPPPD) using the SP daVinci system and proposes effective solutions.

Methods: We retrospectively analyzed the outcomes of 6 patients who underwent RPPPD with SP daVinci system by two surgeons. The primary technical challenges included limited instrument maneuverability, difficulty in maintaining clear surgical views, and the need for precise anastomosis.

Results : Postoperatively, all patients were discharged without significant complications, there was no clinically relevant pancreatic fistula in our patients. Patients had only a few small scars after operation. And also, our results showed that the operation time was gradually decresing.

Conclusions : Implementing enhanced preoperative planning, advanced intraoperative imaging, and specialized robotic tools significantly improved surgical efficiency and patient outcomes.

Corresponding Author : Jin Hong LIM (doctorjin@yuhs.ac)