

Laparoscopic pancreaticoduodenectomy with first right retroperitoneal devascularization to pancreatic head artery and imbedding pancreaticojejunostomy

Renyi QIN

Department of Biliary-Pancreatic Surgery, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, China

Lecture : Until now, LPD is still one of the most challenging operation in the abdomen. The main reason is the special anatomical location of the pancreas, which makes it difficult to resection of the pancreatic tumor, and the risk of bleeding is very high. The complexity of intraoperative digestive tract reconstruction and the high incidence of postoperative complications, especially the high mortality rate after clinical pancreatic fistula (grade B and grad C). How to control intraoperative hemorrhage of LPD and prevent postoperative clinical pancreatic fistula remains an important problem that is still being explored by pancreatic surgeons.

The blood supply for pancreatic head tumor mainly comes from GDA of the common hepatic artery and IPDA of SMA, and the rest comes from the branch of dorsal pancreatic artery of splenic artery. Since 2014, we use the perspective advantage of laparoscopy via the right retroperitoneal approach, first broken GDA from the hepatic artery and IPDA from SMA, then divided pancreas neck body, at this time, almost no arterial blood supply to the pancreatic head, which can reduce the bleeding of the specimen to be resected in the process of tumor resection and facilitate the resection of the uncinate process of the pancreas. In addition, it is beneficial to the dissociation of SMV and the control of its branch bleeding, thus ensuring the safety in the process of resection (Video1).

Pancreatic anastomosis is the most difficult part in LPD digestive tract reconstruction, we innovatively performed a pancreatic duct jejunostomy that did not require suture of the pancreatic duct. This method is simple to operate, especially for small pancreatic duct jejunostomy, which has the advantages of significantly reducing the incidence of clinical pancreatic fistula and preventing bleeding at the pancreatic anastomosis, and greatly guarantees the safety after LPD (Video2).