The role of robotic-Assisted pancreatic surgery: Lessons learned from our initial experience

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Abstract

Introduction: Minimally invasive surgery (MIS) has achieved worldwide acceptance in various fields, however, pancreatic surgery remains one of the most challenging abdominal procedures. Laparoscopic pancreatic surgery has not gained broad acceptance due to the complexity of the procedure, the accuracy required to perform the operation, and the steep learning curve involved. Indeed, the procedure has only achieved widespread consensus for distal pancreatectomy. In the field of major pancreaticoduodenectomies, the laparoscopic approach is still considered to be an ex-tremely demanding method due to the challenge of reconstruction. The develop-ment of the robotic platform has overcome many of the disadvantages of traditional laparoscopy. Robotic surgery (RS) gives the surgeon a three-dimensional stereo-scopic view of the operating field and restores hand-eye coordination that is often lost in traditional laparoscopy when the camera is offset to the plane of dissection. Given the limitations of current laparo-scopic technology and the need for meticulous vascular control as well as complex reconstruction in pancreatic surgery, we hypothesized that RS would be particular-ly a good option for these procedures. We now report our experience with 50 consec-utive robotic-assisted pancreatic resections. We evaluate the safety, feasibility and versatility of this platform in the hands of dedicated, high volume hepato-pancreato-biliary (HPB) surgeons.

Background: Negligibly obtrusive medical procedure has accomplished overall acknowledgment in different fields, be that as it may, pancreatic medical procedure stays one of the most testing stomach methods. Actually, the sign for automated medical procedure in pancreatic illness has been disputable. The current investigation expected to survey the security and plausibility of mechanical pancreatic resection. Robot-helped laparoscopic (RAL) medical procedure was acquainted with beat the restrictions of customary laparoscopic medical procedure. It gives a three-dimensional top quality amplified perspective on the employable field and extra focal points as far as improved aptitude and accuracy with its expanded opportunity of development and disposal of tremor.(14,15) However, in spite of the numerous hypothetical focal points of RAL medical procedure over ordinary laparoscopy, its clinical use stays constrained, fundamentally because of the expanded expense related with this innovation. Directly, just a couple of focuses worldwide(16-19) have revealed their encounters with RAL HPB medical procedure. For liver resections, the anatomical area of the injuries and careful resection were characterized by the Couinaud

classification. The trouble of liver resections was evaluated by the scoring framework proposed by Ban et al for laparoscopic resections, whereby a score of 1–3 was reviewed as low trouble, 4–6 as middle of the road trouble and 7–10 as high difficulty. For left-sided pancreatectomies, transection of the pancreas to one side of the entrance vein was named a subtotal pancreatectomy. An all-inclusive pancreatectomy was characterized by the ongoing International Study Group of Pancreatic Surgery definition and incorporated any pancreatic resection for a privately propelled disease that necessary resection of an adjoining organ, for example, the stomach (for left-sided pancreatectomies), colon or a significant vein (for example the gateway vein)

Method:- We retrospectively reviewed our experience of robotic pancreatic resection done in Sanchinarro University Hospital. Clinicopathologic characteristics, and perioperative and postoperative outcomes were recorded and analyzed.

Results: From October 2010 to April 2016, 50 patients experienced automated helped medical procedure for various pancreatic pathologies. All methodology were performed utilizing the da Vinci mechanical framework. Of the 50 patients, 26 were male and 24 female. The normal age of all patients was 62 years. Usable time was 370 minutes. Among the methods performed were 16 pancreaticoduodenectomies (PD), 23 distal container createctomies (DP), 11 tumor enucleations (TE). The mean emergency clinic remain was 17.6 days in PD gathering, 9.0 days in DP gathering and 8.4 days in TE gathering. Pancreatic fistula happened in 10 cases (20%), 2 after PD, 3 after DP, and 5 after TE. Four patients had postoperative bonding in PD gathering and one in DP gathering. Transformation to open laparotomy happened in four patients (8%). No genuine intraoperative complexities were watched. From our early experience, robotic pancreatic surgery is a safe and feasible procedure. Further experience and follow-up are required to confirm the role of robotic approach in pancreatic surgery.

Biography: Emilio Vicente has completed his Residency in General Surgery. He is currently the Director of the General and Digestive Surgery Service at Sanchinarro University Hospital and Clara Campal Oncological Center and; Chairman of the Surgery Section at Faculty of Medicine, San Pablo University. His other professional positions include: Digestive Viscera Transplant Program Director at Ramón y Cajal Hospital (Madrid, Spain); Chief of the General Surgery Section at Ramón y Cajal General

Extended Abstract

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