



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en



VISCERAL SURGERY VIDEOS

Robotic longitudinal side to side pancreaticojejunostomy (Partington-Rochelle or modified Puestow procedure) for chronic pancreatitis (with video)



J.-B. Lequeu*, B. Doussot, O. Facy

*Dijon University Hospital, Department of Digestive Surgical Oncology, rue Paul-Gaffarel,
Dijon 21000, France*

Available online 16 September 2022

Abdominal pain is a major clinical signs in patients with chronic pancreatitis. Current guidelines recommend medical treatment associated with endoscopy as a first approach [1]. However, observational studies and a recent randomized clinical trial involving more than 80 patients showed that surgery performed early in the history of chronic pancreatitis could offer a better pain control. The use of the robotic platform in this settings could improve the laparoscopic approach but remains to be evaluated further [2]. This video shows the case of a 77 year-old male patient with chronic pancreatitis. His past medical history was chronic alcoholism with an alcohol withdrawal 15 years ago and diabetes. The patient presented typical pancreatic duct pain with a substantial limitation of his daily activities with both endocrine and exocrine insufficiency. The CT-scan showed a major pancreatic atrophy with a ductal dilatation over 1 cm and calcifications in the pancreatic head without any associated biliary, portal or duodenal compression (Figure 1). MRI and endoscopic US did not show any argument in favor of malignancy. In this patients, endoscopic management was not decided because calcifications in the head of the pancreas would have led to a failure of endoscopic duct stenting procedure.

* Corresponding author.
E-mail address: jean-baptiste.lequeu@chu-dijon.fr (J.-B. Lequeu).

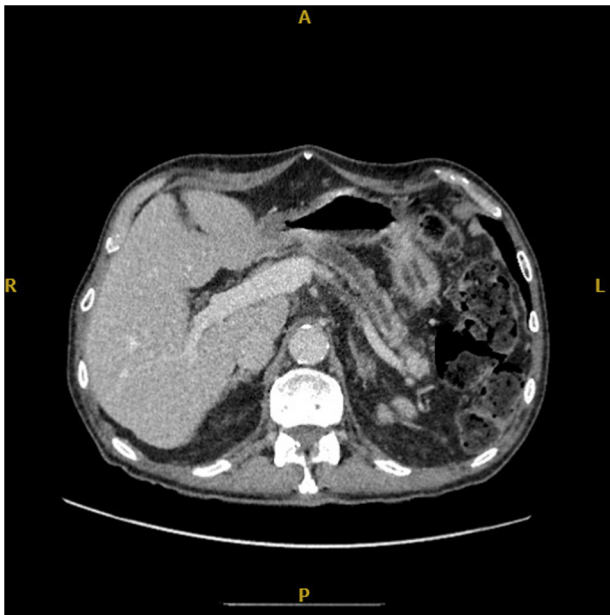


Figure 1. Main pancreatic duct dilatation.

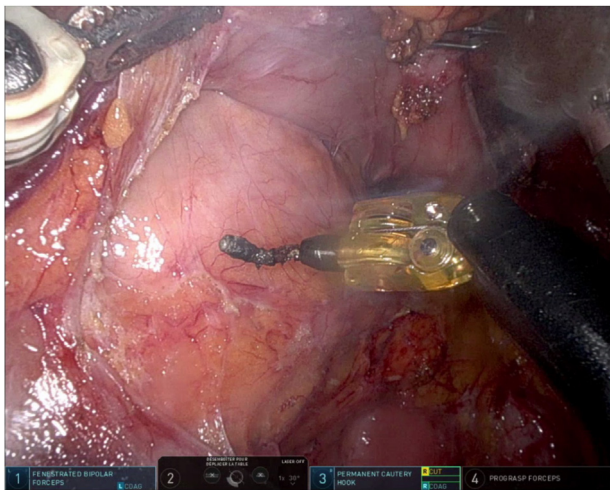


Figure 2. Opening of the lesser sac.

This video shows a robotic assisted longitudinal side to side pancreaticojejunostomy [3]. The patient was placed in supine position, robotic cart was positioned at the level of his head and 5 ports were inserted. Section of the gastrocolic ligament and opening of the lesser sac allowed to the exposure of the pancreas (Figure 2). The splenic artery was preserved at the upper border of the pancreas. A large longitudinal opening of the main pancreatic duct from the neck to the tail was performed (Figure 3). The stones trapped in the wall of the pancreatic head could not be extracted. After the preparation of a jejunal afferent loop 60cm from the angle of Treitz, a side to side precolic pancreaticojejunostomy with barbed sutures was performed (Figure 4). Then, a jejunojunal anastomosis with barbed sutures was performed about 60cm downward with closure of the mesenteric defect using non absorbable sutures. Lastly, the jejunum between the pancreaticojejunostomy and the jejunojunal anastomosis was sectionned using a mecanic stappler to obtain a Roux-en-Y procedure. The operation duration was 180 minutes with no intraoperative complication or blood loss. The patient had no postoperative complication and discharged by day 3. This video shows

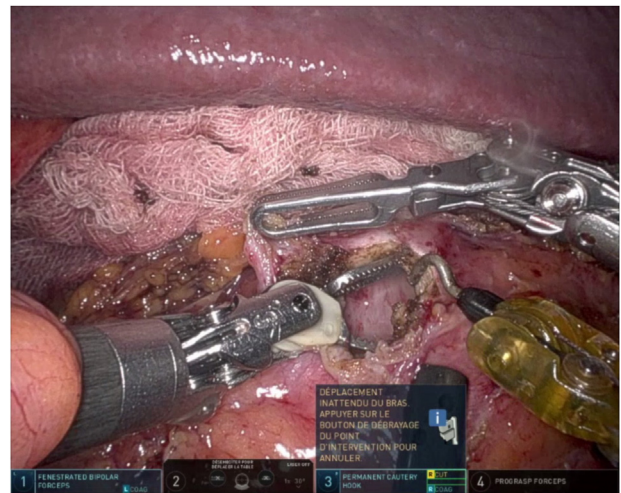


Figure 3. Longitudinal opening of the main pancreatic duct.

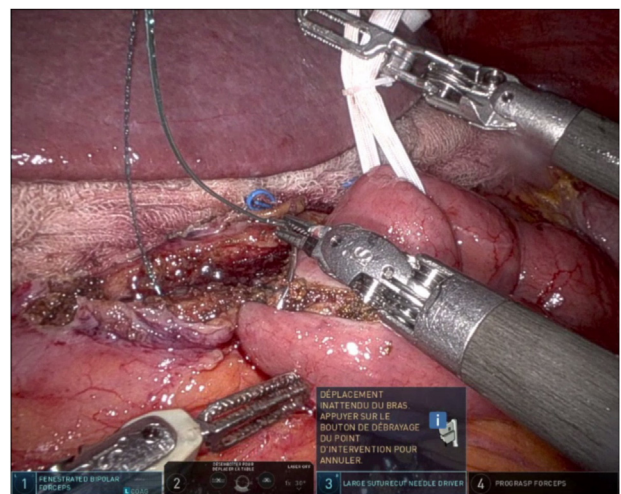


Figure 4. Precolic pancreaticojejunostomy.

the different steps necessary to perform a longitudinal side to side pancreaticojejunostomy. It will be usefull for all surgical teams having to manage patients with chronic pancreatitis.

Online Supplement. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.jvisc.2022.05.005>.

Disclosure of interest

The authors declare that they have no competing interest.

References

- [1] Partington PF, Rochelle RE. Modified Puestow procedure for retrograde drainage of the pancreatic duct. *Ann Surg* 1960;152:1037–43.
- [2] Issa Y, Kempeneers MA, Bruno MJ, et al. Effect of Early surgery vs endoscopy-first approach on pain in patients with chronic

pancreatitis: The ESCAPE randomized clinical trial. *J.A.M.A* 2020;323:237–47.

[3] Masayuki Kitano, Thomas M, Gress, Pramod K, et al. International consensus guidelines on interventional endoscopy in chronic pancreatitis. Recommendations from the working

group for the international consensus guidelines for chronic pancreatitis in collaboration with the International Association of Pancreatology, the American Pancreatic Association, the Japan Pancreas Society, and European Pancreatic Club, *Pancreatology* 2020;20:1045-1055.