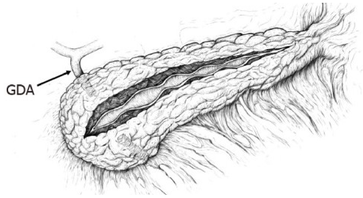
Short Laparoscopic Pancreaticojejunostomy Combined with Pancreatoscopic-Guided Laser Lithotripsy in the Treatment of Chronic Pancreatitis: A Prospective Case Series

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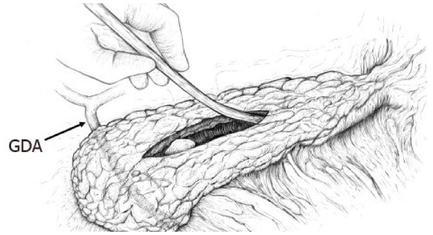
BACKGROUND

Chronic pancreatitis often requires surgical intervention when medical management fails. Residual pancreatic duct stones remain a major challenge, contributing to persistent pain and recurrent acute pancreatitis. Conventional pancreaticojejunostomy (L-PJ) may not ensure complete stone clearance. This study evaluates the feasibility and effectiveness of laparoscopic pancreaticojejunostomy combined with endoscopic-guided laser lithotripsy in optimizing stone removal and improving patient outcomes.



METHODS

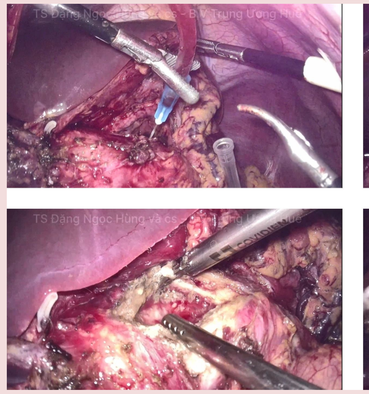
A prospective case series was conducted on six patients diagnosed with chronic pancreatitis who underwent endo-laparoscopic short-pancreaticojejunostomy between August 2023 and March 2024.
Key parameters assessed included operative time, intraoperative blood loss, duration of hospital stay, and postoperative outcomes, particularly pain relief and return to daily activities.



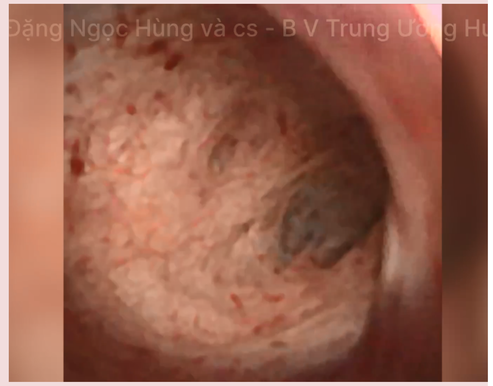
RESULTS

No.	Age	Sex	VAS	Radiology	Wirsung diameter (mm)	Operative Time (min)	Length of stay (day)	Follow up (month)
1	22	Female	7	PD stones + Pseudocyst	9	195	8	12
2	57	Male	9	PD stones	8	180	9	10
3	35	Male	8	PD stones	10	175	9	9
4	18	Male	9	PD stones + suspicion BD-IPMN	8	225	7	9
5	41	Male	7	PD stones + Parenchymal calcification	9	210	10	8
6	60	Female	9	PD stones	11	190	7	6

The study cohort consisted of six patients (mean age: 38 years), four of whom had a history of alcohol and/or tobacco use. Two patients presented with pancreatic pseudocysts. The mean operative time was 165 minutes, with an average intraoperative blood loss of 75 mL. The mean hospital stay was 9 days. No postoperative complications or reoperation were reported. Follow-up evaluations at 1, 3, and 6 months demonstrated sustained pain relief, with no recurrence of abdominal pain or radiological evidence of pancreatic stones. All patients successfully resumed normal activities within the follow-up period.

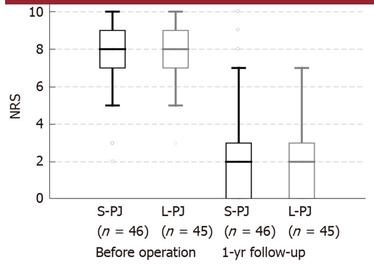


Endo-laparoscopic lithotripsy-assisted pancreatic surgery (ELLPS)

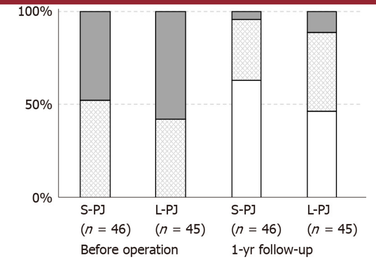


Complete stone clearance in pancreatoscopic view

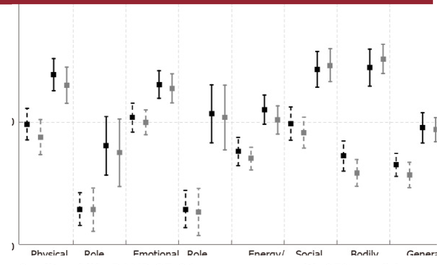
REFERENCE



The intensity of pain according to the NRS (0-10) before surgery and 1 yr after surgical treatment of chronic pancreatitis. NRS: Numerical rating scale;



Pain treatment before surgery and 1 yr after surgical treatment of chronic pancreatitis. Gray bars, opioid users; diamond-filled bars, users of non-opioid painkillers; white bars, non-users of any painkillers.



Quality of life RAND SF-36 mean scores, with 95% confidence interval, before surgery and 1 yr after surgical treatment of chronic pancreatitis. Black, S-PJ (*n* = 46), gray, L-PJ (*n* = 45); dashed lines, before surgery; solid lines, 1 yr after surgical treatment of chronic pancreatitis.

CONCLUSION

The combined approach of laparoscopic pancreaticojejunostomy and endoscopic-guided laser lithotripsy is a feasible, safe, and effective strategy for the management of chronic pancreatitis. This technique may enhance stone clearance, reduce the extent of surgical reconstruction, and improve patient outcomes. Further large-scale studies are warranted to validate these findings and assess long-term benefits.

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REFERENCE : Murruste M, Kirsimägi Ü, Kase K, Veršinina T, Talving P, Lepner U. 'Short' pancreaticojejunostomy might be a valid option for treatment of chronic pancreatitis in many cases. *World J Gastrointest Surg.* 2021;13(12):1673-1684. doi:10.4240/wjgs.v13.i12.1673

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