Laparoscopic Lateral Pancreateicojunostomy

INTRODUCTION

A lateral pancreateicojunostomy, also known as the Puestow procedure, is a complex surgery performed for symptomatic chronic pancreatitis associated with a dilated pancreatic duct secondary to calcifications or strictures. An open approach is traditionally used due to the complexity of the case, and there have only been a handful of laparoscopic case reports published.

METHODS AND PROCEDURES

A 42-year-old woman presented with diffuse abdominal pain that was worse postprandially. A computed tomography scan revealed a dilated pancreatic duct measuring 1.4 cm with a proximal obstructing calcified stone. We planned to treat by fragmentation of stones by extracorporeal shock wave lithotripsy, followed by endoscopic pancreatic sphincterotomy. However, there is no response to that treatment. A 5-port foregut technique was used, and a 5 cm ductotomy was performed with an ultrasonic scalpel. Calcified stones were cleared from the duct, and a roux-en-y pancreateicojunostomy was performed using a hand-sewn technique. The jejunojunostomy was completed using a stapled technique.

RESULTS

All procedures were completed successfully laparoscopically with a operating time of 186 minutes and intraoperative blood loss of 30mL. The patient had a relatively uncomplicated hospital course with return of bowel function on postoperative day 4. CT scan on postoperative day 5 showed fluid collection around pancreateicojunostomy. However, she was ambulating, tolerating a regular diet and discharged home on postoperative day 12.

CONCLUSION

Laparoscopic lateral pancreateicojunostomy is a technically feasible, safe and effective surgical procedure in selected patients with chronic pancreatitis with pancreatolithosis.