

### **Early Experience with Minimally Invasive Surgery for Complications of Pancreatitis**

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#### **Abstract**

**Introduction:** Surgical management is usually reserved as the last resort treatment for complications of pancreatitis. These have traditionally been performed via open surgery due to the dense adhesions resulting from the surrounding tissue inflammation from pancreatitis. However, with recent advancements in minimally-invasive pancreatic surgery, increasing numbers of studies have reported the safety and feasibility of performing these procedures via laparoscopic or robotic-assisted surgery. In this study, we present our initial experience with 7 consecutive cases of minimally invasive pancreatic surgery (MIPS) performed for the management of pancreatitis.

**Method:** Retrospective review of 7 consecutive patients who underwent MIPS for pancreatitis between 2016-2020.

**Results:** There were 2 laparoscopic necrosectomies with distal pancreaticosplenectomies for ruptured pseudocysts, 1 laparoscopic ligation of pancreaticopleural fistula, 1 laparoscopic cyst-jejunostomy for pseudocyst, 1 laparoscopic cyst-gastrostomy for pseudocyst, 1 robotic modified Puestow procedure for chronic pancreatitis and one robotic-assisted distal pancreaticosplenectomy and drainage of necrosis for walled off necrosis. The overall, median operative time was 290 (range, 65-490) min, median blood loss was 50 (range, 0-1200) ml and median length of stay was 7 (range, 4-32) days. There were 2 grade 3 complications due to postoperative pancreatic fistulae.

**Conclusion:** This early experience demonstrated that MIPS is a safe and feasible alternative to open surgery for the treatment of complications of pancreatitis.

**Key words:** laparoscopic; minimally-invasive surgery, pancreatitis, robotic