

Laparoscopic Transgastric Cystogastrostomy for Debridement and Drainage of “Walled-Off Pancreatic Necrosis”

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Context Walled-off pancreatic necrosis (WOPN) is a known complication of acute and chronic pancreatitis. Indications for treatment of WOPN are infection, a rapid increase in size, pain, or biliary or duodenal obstruction. Endoscopic transgastric treatment of pseudocysts with liquid content is successful in approximately 90% of patients. However, the treatment of WOPN is less satisfactory. **Objective** To evaluate the clinical results of laparoscopic transgastric cystogastrostomy and to determine the potential advantages of this new therapeutic option to treat WOPN. **Methods** We considered patients with WOPN treated by laparoscopic transgastric cystogastrostomy. This procedure was performed by ultrasonographically localizing the WOPN and opening the anterior stomach wall to expose the posterior gastric wall in close contact with the necrotic cavity. After creating a sufficient drainage orifice using diathermy a longer anastomosis was performed using an endoscopic stapler (Echelon 60). The cavity is then debrided using soft graspers and suction to remove as much as possible the

necrotic tissue. **Results** From September 2012 five patients underwent laparoscopic cystogastrostomy: 2 males and 3 females with a median age of 51 years (range: 47-56 years). In all patients the WOPN developed after acute pancreatitis and the median delay between the acute onset and surgery was 3 months (range: 1-20 months). The median WOPN diameter was 13 cm (range: 9-23 cm). The procedure was performed with 4 trocars in 4 patients and 5 trocars in one. Mean operative time was 170 minutes (range 160-180 min). No mortality and postoperative morbidity were recorded. Median postoperative stay was 9 days (range 5-23 days). One patient was readmitted for further open necrosectomy of another cavity. With a median clinical and radiological follow-up of 6 months (range: 1-8 months), no recurrence of WOPN was observed. **Conclusion** Although small number of patients, laparoscopic transgastric cystogastrostomy is a safe and effective procedure for the debridement and drainage of WOPN in contact with the posterior wall of the stomach.