



# Laparoscopic – Transgastric Endoscopic-Assisted Cystgastrostomy for Walled-Off Pancreatic Necrosis



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## Background

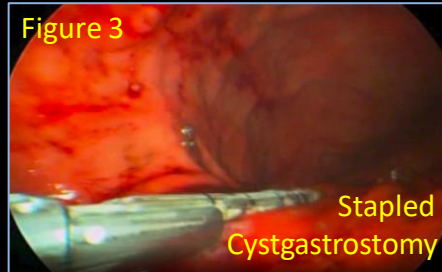
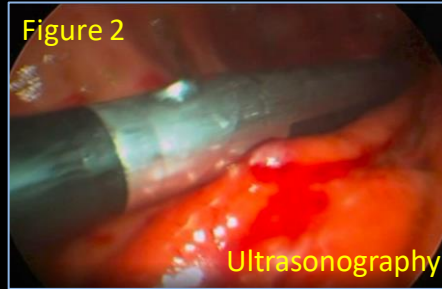
Walled Off Pancreatic Necrosis (WOPN) is a chronic result of acute pancreatitis. These cyst cavities have been traditionally drained with open surgery. More modern approaches with endoscopic drainage and debridement are used effectively for pancreatic pseudocysts and have been used for WOPN; however, these cases usually require several debridement procedures per patient. We illustrate our combined surgical and endoscopic approach – laparoscopic Transgastric Endoscopic-assisted Cystgastrostomy (Lap TEC) – for definitive single stage treatment.

The case presented is that of a 45 year old woman with alcohol-induced pancreatitis. After cyst maturation over 3 months time, a persistent symptomatic WOPN remained

## Technique

Operative steps:

1. Laparoscopy; transgastric placement of two 5 ports and one 10 mm port (all trocars balloon-tipped) (Fig. 1)
2. Combined laparo-endoscopic insufflation of the stomach
3. Laparoscopic transgastric ultrasonography to characterize the WOPN and select a site for gastrotomy (Fig. 2)
4. Gastrotomy and creation of an 8 cm cystgastrostomy with surgical stapler (Fig. 3)
5. Aspiration of the cyst contents
6. Maturation of the cystgastrostomy with absorbable reinforcement sutures (Fig. 4)
7. Laparoscopic, endoscopically-assisted necrosectomy (Fig. 5)
8. Placement of nasogastric tube through the cystgastrostomy
9. Closure of the gastrotomy sites (Fig. 6)



## Results

- 21 patients (2017-2021)
- 4 required ICU stay (all due to vasopressor need due to SIRS)
- Median LOS 4 days
- 19 patients had complete resolution of symptoms (2 partial responses)
- No patient required reoperation

## Conclusions

Lap TEC is an effective approach for patients with walled off pancreatic necrosis. These patient should be managed by a multidisciplinary team including gastroenterologists and surgeons. Approach chosen for management of WOPN should include patient risk factors, size and location of WOPN, amount of cavitory debris and local expertise. Lap TEC has demonstrated a high degree of safety and efficacy for patients requiring debridement and drainage of WOPN.

