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Two-step approach for recurrent pancreatic pseudocysts: endoscopic ring drainage of the stent transpapillary combined with the posterior gastric wall

Wei Zhang¹; Sen-Lin Hou²; Li-chao Zhang¹
1 Department of Biliopancreatic Endoscopic Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, Hebei, China.
2 Department of Biliopancreatic Endoscopic Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, Hebei, China
# Department of Biliopancreatic Endoscopic Surgery, The Second Hospital of Hebei Medical University, Shijiazhuang, Hebei, China

Wei Zhang: zhangweipujia@163.com
Li-chao Zhang: danyixiaoyisheng@163.com
Sen-Lin Hou: xiaoyishengpujiu@163.com

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Dear Editor,

Pancreatic pseudocyst is a complication of pancreatitis, with an incidence of about 5-16% and a incidence of about 20-40% in chronic pancreatitis¹. There are various ways to treat pancreatic pseudocysts, but the recurrence rate of cysts is as high as 23.9%². The cause of recurrent pancreatic pseudocyst after acute pancreatitis or chronic pancreatitis is usually a disruption or rupture of the pancreatic duct. There are not many clinical options for the treatment of recurrent pseudocysts, and there is still a high recurrence of pseudocysts after EUS guided drainage alone³. We present here a promising endoscopic treatment for patients with recurrent pancreatic pseudocyst.

Case report

A 71-year-old woman with three recurrent episodes of pancreatic pseudocysts underwent percutaneous drainage and endoscopic internal drainage alone. We agreed to adopt a two-step approach for the treatment of recurrent pseudocysts.
In the first step, a duodenoscope was applied to place a double pigtail pancreatic duct stent through the large duodenal papilla to drain the pseudocyst; in the second step, a double pigtail duct stent was placed through the stomach wall by endoscopic ultrasonography to form circular drainage, which made the drainage of the pseudocyst more thorough, maximized the drainage of the cyst fluid, shortened the patient's hospitalization time and reduced the cost. And the two surgeries were performed during a single anesthesia session, minimizing trauma to the patient. At the same time, this method embodies the concept of rapid recovery.

Discussion
Single Percutaneous cyst drainages are less effective than endoscopic drainages and also have the risk of causing a pancreatico-cutaneous fistula. Also simple transpapillary pancreatic duct stent drainage are not effective in the treatment of recurrent pancreatic pseudocysts. And the recurrence rate is very high. The treatment of recurrent pancreatic pseudocysts should be a transpapillary and transmural endoscopic treatment in the case of a rupture of the pancreatic duct. Combining the two surgical methods makes a very ingenious use of circular drainage in one session as a one-stop-shop to solve the patient's disease. We recommend this method for recurrent pseudocysts.

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References
Fig. 1. The guide wire enters the pseudocyst through the pancreatic duct ②. The double pigtail stent is shown under the X-ray ③. EUS showed that one end of the double pigtail stent was placed into the cyst before puncture (The arrows indicate). ④. Postoperative CT coronal imaging showed the connection of two double porcine tail stents in the shape of a ring drainage (The arrows indicate ring drainage).