EUS-guided Pancreatogastrostomy for Pancreatic Duct Obstruction Unsuitable for Transpapillary Drain

Ji Woong Jang, Sang Soo Lee, Do Hyun Park, Dong-Wan Seo, Sung-Koo Lee, Myung-Hwan Kim

Division of Gastroenterology, Department of Internal Medicine, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Background/Aims: Patients with pancreatic duct obstruction, which can be caused by chronic pancreatitis, suffer from recurrent pain. Therefore, the benefit of relieving main pancreatic-duct obstruction has been best studied with chronic pancreatitis. Recently, endoscopic ultrasound-(EUS)-guided pancreaticogastrostomy has been reported as an alternative method for reducing ductal hypertension in patients with chronic pancreatitis. We evaluated our 3-year experience about feasibility and safety of EUS-guided pancreaticogastrostomy or pancreaticoduodenostomy for symptomatic patients with pancreatic duct obstruction who are unsuitable or unsuccessful for transpapillary drainage.

Method: We analyzed 22 symptomatic patients with pancreatic duct obstruction who are unsuitable or unsuccessful for transpapillary drainage from June, 2007 to June, 2010.

Result: This procedure were successful in eighteen patients (82% [18/22]: technical success rate). One of eighteen patients who had technical success lost to follow-up. Fourteen patients showed decrease in pain score more than 3 point within 2 months (64% [14/22] as intention treat, and 82% [14/17] as per protocol; clinical success rate). The pain score decreased from 6.9 to 1.4 (p< 0.001), 1 minor bleeding, 1 stent migration, and 1 pneumoperitoneum were noted within 2 months after procedure (14% [3/22]: complication rate). Five recurred in followed patients with clinical response (300 days; median follow-up length, ranged from 2 month to 27 month).

Conclusions: EUS-guided pancreaticogastrostomy or pancreaticoduodenostomy may be feasible and safe, and can be used as an alternative option to surgery in symptomatic patients with pancreatic duct obstruction who are unsuitable or unsuccessful for transpapillary drainage.