

## Endoscopic or Surgical Approach to Cure Pancreatitis and Its Complications: The History Continues

Raffaele Pezzilli

Department of Digestive Diseases and Internal Medicine, Sant'Orsola-Malpighi Hospital.  
Bologna, Italy

Endoscopic and surgical treatment are the two main techniques for the treatment of pancreatitis, mainly represented by the persistent pain not responding to medical treatment and the complications associated with pain, such as pseudocysts and ductal stenosis. However, the dilemma is related to the procedures we use to treat these complications: surgical or endoscopic approach? Probably the treatment of choice is based on the expertise available in the various centers, but we also need an evidence-based approach. Thus, in 2007 [1], I commented on the paper of Cahen *et al.* [2] with enthusiasm for two reasons: the first was that, for the first time, a comparative study on the long term results of endoscopic *vs.* surgical treatment of chronic pancreatitis patients was carried out, and the second was that the follow-up period was sufficient to assess the results of the two different treatments, not only from a medical point of view but also considering the patient reported outcomes using the SF-36 questionnaire. For the same reasons, I invite you to read, with attention, the paper of Varadarajulu *et al.* [3] reporting the data of the clinical outcomes of EUS-guided cyst-gastrostomy in comparison to surgical cyst-gastrostomy for the management of patients with uncomplicated pancreatic pseudocysts; the authors also evaluated the cost analysis of each treatment modality. Unfortunately, this was a retrospective case-controlled study carried out in a tertiary-referral center.

Consecutive patients with uncomplicated pancreatic pseudocysts managed by surgical and EUS guided cyst-gastrostomy were considered. An independent observer blinded to all clinic outcomes matched each patient who underwent a surgical cyst-gastrostomy with 2 patients who underwent a EUS-guided cyst-gastrostomy for age, etiology of pancreatitis and size of the pseudocyst. Ten male patients with a mean age of 42.3 years who underwent surgical cyst-gastrostomy were matched with 20 patients who underwent an EUS-guided cyst-gastrostomy. The authors found no significant differences in demographics, major comorbidities, and clinical characteristics between both cohorts. Regarding the evaluation of the two procedures, there were no significant differences in rate of treatment success (100% for the surgical procedure and 95% for the endoscopic procedure), the absence of procedural complications in the two arms, or reinterventions (10% in the surgical arm *vs.* 0% in the endoscopic arm). The mean length of a post-procedure hospital stay for a EUS-guided cyst-gastrostomy was clearly significantly shorter than for surgical cyst-gastrostomy (2.7 *vs.* 6.5 days). The average direct cost per case for EUS-guided cyst-gastrostomy was significantly less when compared with surgical cyst-gastrostomy, which corresponded to a cost savings of \$5,738 per patient. EUS-guided cyst-gastrostomy should be considered as a first-

line treatment approach for patients with uncomplicated pancreatic pseudocysts, because the procedure is cost saving and associated with a shorter length of a post procedure hospital stay when compared to surgical cyst-gastrostomy. There was no significant difference in clinical outcomes between both treatment modalities. As pointed out by the same authors, the limitations of this study are that it was retrospective, based on non-randomized design; a small patient population was evaluated, the follow-up was too short and the selection criteria was too strict because subjects with pancreatic abscesses or necrosis were not included. The authors did not report the reason why these patients underwent a surgical or an endoscopic procedure and what the time was between the appearance of the pseudocyst and the treatment. Taking into account the etiology of pancreatitis, 60% of patients had idiopathic pancreatitis, 20% alcoholic pancreatitis and the remaining 20% had biliary pancreatitis; the further question is: how many patients studied may have chronic pancreatitis? All these points remain unanswered in the study of Varadarajulu *et al.* [3]. I agree with the authors that the endoscopic approach is an advantage in debilitated patients and those with prohibitive comorbidities but without the need for general anesthesia and the stress of an open abdominal operation, but more attention should be paid to the different etiology of patients having this complication. The fate of pseudocysts in patients with acute pancreatitis and in those with chronic pancreatitis is different [4]. I believe that this study is useful only for raising the need of further prospective and comparative studies in curing pancreatic complications such as pseudocysts. Future studies on this issue should also take into account the patient's point of view by

using a structured quality of life questionnaire.

---

**Keywords** Endoscopy; Endosonography; Follow-Up Studies; Pancreatic Pseudocyst; Pancreatitis, Acute Necrotizing; Pancreatitis, Alcoholic; Pancreatitis, Chronic; Surgical Procedures, Operative

**Conflict of interest** The authors have no potential conflicts of interest

**Correspondence**

Raffaele Pezzilli  
Department of Digestive Diseases and  
Internal Medicine  
Sant'Orsola-Malpighi Hospital  
Via Massarenti, 9  
40138 Bologna  
Italy  
Phone: +39-051.636.4148  
Fax: +39-051.636.4148  
E-mail: raffaele.pezzilli@aosp.bo.it

Document URL: <http://www.joplink.net/prev/200807/news.html>

---

**References**

1. Pezzilli R. How to cure chronic pancreatitis: endoscopic or surgical approach? JOP. J Pancreas (Online) 2007; 8:355-6. [PMID 17495367]
2. Cahen DL, Gouma DJ, Nio Y, Rauws EA, Boermeester MA, Busch OR, et al. Endoscopic versus surgical drainage of the pancreatic duct in chronic pancreatitis. N Engl J Med 2007; 356:676-84. [PMID 17301298]
3. Varadarajulu S, Lopes TL, Wilcox CM, Drelichman ER, Kilgore ML, Christein JD. EUS versus surgical cyst-gastrostomy for management of pancreatic pseudocysts. Gastrointest Endosc 2008 Jun 9. [Epub ahead of print]. [PMID 18547566]
4. Aghdassi AA, Mayerle J, Kraft M, Sielenkämper AW, Heidecke CD, Lerch MM. Pancreatic pseudocysts: when and how to treat? HPB (Oxford) 2006; 8:432-41. [PMID 18333098]