

CYSTOGASTROSTOMY WITH ARGON PLASMA COAGULATION PROBE AND WITHOUT ENDOSCOPIC ULTRASONOGRAPHY

Cistogastrostomia com sonda de coagulação de plasma de argônio e sem ultrassonografia endoscópica

Omer Faruk **OZKAN**¹, Erdem **AKBAL**¹, Sukru **TAS**², Fahri **GUNES**³

How to cite this article: Ozkan OF, Akbal E, Tas S, Gunes F. Cystogastrostomy with argon plasma coagulation probe and without endoscopic ultrasonography. ABCD Arq Bras Cir Dig. 2019;32(2):e1444. DOI: /10.1590/0102-672020180001e1444

From the ¹Department of General Surgery; ²Department of Gastroenterology; ³Department of Internal Medicine, Çanakkale Onsekiz Mart University, Çanakkale, Turkey.

Correspondência:

Omer F. Ozkan
Email: ozkanfomer@gmail.com

HEADINGS - Argon Plasma Coagulation, Ultrasonography, Gastrostomy
DESCRITORES - Coagulação com Plasma de Argônio, Ultrassonografia, Gastrostomia

Financial source: none
Conflict of interest: none
Received for publication: 01/04/2017
Accepted for publication: 06/02/2019

INTRODUCTION

Acute pancreatitis is an inflammatory condition of the pancreas which can lead to morbidity. Formation of pancreatic pseudocyst is one of the well-known complication. While small pseudocysts are asymptomatic, large ones can become symptomatic and cause several complications including infection, rupture, bleeding, biliary complications and portal hypertension^{1,2}.

Various interventions are available for the management of symptomatic pancreatic pseudocysts. Endoscopic ultrasound (EUS) guided cystogastrostomy is a choice for treatment of large pseudocysts, which bulge into gastric lumen^{2,3}. In this paper we present a case of large sized who was managed with argon plasma coagulation probe and without endoscopic ultrasonography.

CASE REPORT

Fifty years old male was in reanimation clinic with the diagnosis of complicated and severe acute pancreatitis due to gallstones for three months. His physical examination revealed a large sized mass extending from epigastric to left upper quadrant of abdomen. The contrast enhanced CT showed a

cystic lesion with 150x100 mm dimensions in the tail and body of pancreas pushing the stomach (Figure1). The diagnostic upper gastrointestinal endoscopy revealed a bulge localized on large curvature related to pancreatic pseudocyst. An endoscopic cystogastrostomy was planned. After detection of the area for cytogastrostomy in gastric lumen with standard video-endoscope (Pentax EG 290 LK), it was marked by argon plasma coagulation probe (30 watt); the gastric wall was opened step-by-step with the probe (60 watt) until pancreatic fluid drainage into stomach was seen. After aspiration of pancreatic fluid (approximately 1500 ml), the gastric opening area enlarged by using an ERCP sphincterotomy. Then a guide wire was inserted into the cyst with the C arm fluoroscopy. Finally, 8.5 F pigtail plastic stent was placed into the cyst through the gastric lumen. The procedure was completed without any complication.

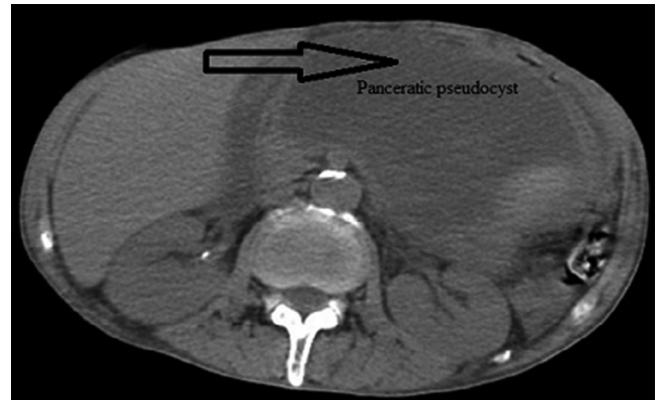


FIGURE1 - Pancreatic pseudocyst with 150x100 mm pushing gastric wall

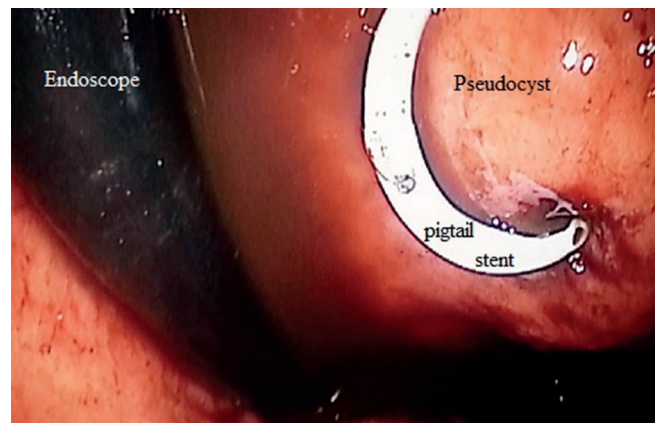



FIGURE 2 - Plastic pigtail stent installed with argon plasma coagulation probe cut

DISCUSSION

EUS guided cystogastrostomy is a safe method for management of pancreatic pseudocysts^{1,3}. EUS assisted cytogastrostomy has a significant advantage by providing relation between cyst wall and gastric wall, cyst fluid imaging features, and gastric wall vessels². If pseudocysts have a bulge through the gastric lumen, cytogastrostomy can be performed without EUS. To avoid the complications such as bleeding, cystogastrostomy was performed by an argon plasma coagulation probe^{2,3}. In the literature, EUS with cytogastrostomy procedures usually performed with needle knife and YAG laser⁴.

Our case has demonstrated that argon plasma coagulation without endoscopic ultrasonography cytogastrostomy can be an option in handling large volume pancreatic pseudocyst during endoscopic cystogastrostomy.

 This is an open-access article distributed under the terms of the Creative Commons Attribution License.

ORCID

Omer F. Ozkan: 0000-0002-6644-2413

REFERENCES

1. Ake Andrén-Sandberg, Christos D. Pancreatic pseudocysts in the 21st century. Part II: Natural history. *JOP* 2004; 5: 64-70.
2. Buchi KN, Bowers JH, Dixon JA. Endoscopic pancreatic cystogastrostomy using the Nd: YAG laser. *Gastrointest Endosc*. 1986;32:112-114.
3. Lopes CV, Pesenti C, Bories E, Caillol F, Giovannini M. Endoscopic-ultrasound-guided endoscopic transmural drainage of pancreatic pseudocysts and abscesses. *Scand J Gastroenterol*. 2007;42:524-529.
4. Rasmussen DN, Hassan H, Vilman P. Only few severe complications after endoscopic ultrasound-guided drainage of pancreatic pseudocysts. *Dan Med J*. 2012;59:A4406.