Turk J Gastroenterol *2014; 25: 216-7*

Endoscopic treatment of heterotopic pancreas localized in the duodenum

To the Editor,

Heterotopic pancreas is most frequently seen in the duodenum, lacking the normal anatomic and vascular structure of the pancreas (1). The preoperative diagnosis is usually complex and challenging. Treatment of cystic dystrophia of a heterotopic pancreas (CDHP) remains controversial. In this letter, we are presenting a case of giant CDHP that was diagnosed within the preoperative stage and treated with endoscopic cystoduodenostomy.

A 50-year-old male patient was referred to our clinic with a presenting complaint of jaundice. Hypertension was present in the medical history. He had a history of alcohol abuse. Physical examination was normal other than jaundice. Blood test results were: alkaline phosphatase 1564 U/L, gamma glutamyl transpeptidase 1449 U/L, amylase 250 U/L, total bilirubin 3.5 mg/dL, and direct bilirubin 2.5 mg/dL. Endosonographic examination (EUS) revealed a bulging cystic lesion in the duodenum with a diameter of 7 cm, originating from the wall of the duodenum (Figure 1). A window was created for the cyst that protruded into the duodenum and caused jaundice; with the guidance of endosonography, cyst contents were drained via cystoenterostomy procedure. Cystoenterostomy was completed without stent replacement. Carsinoembryonic antigen (CEA) level was normal, but amylase was 2250 U/L. By entering through the pre-created window, multiple biopsies were performed from the cyst wall. The patient was diagnosed with CDHP on microscopic examination from biopsy samples (Figure 2). After a year, complete resolution was observed.

Cystic dystrophia of a heterotopic pancreas is most frequently seen in the peripapillary duodenum (2). A pseudocyst in ectopic pancreatic tissue located in the duodenal wall is a relatively rare condition (3). The most common EUS findings in CDHP are hypertrophy in the duodenal wall, hypoechoic cavity in the muscularis propria, and a duct structure surrounding the cyst (2). In our case, EUS revealed hypertrophy in the duodenal wall and hypoechoic cavity in the muscularis propria. Normal CEA level was found in an analysis of cyst contents, and high amylase level plus EUS findings indicated that the initial diagnosis was a pseudocyst developing in a state of pancreatitis.

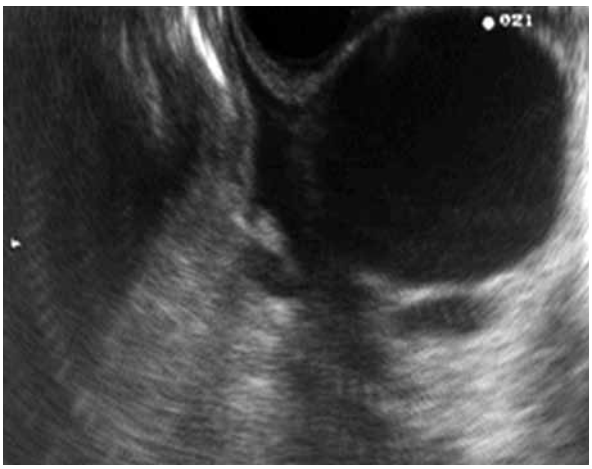

Figure 1. Linear EUS image of cyst in the duodenal wall.

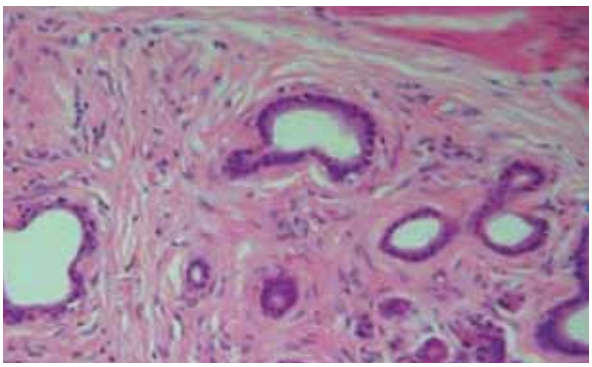

Figure 2. Microscopic examination of cyst in the duodenal wall. Cystic dilatation of the pancreatic ducts, sclerosis, and inflammation.

This case was presented at the 28th Turkish Gastroenterology Week, in Antalya, November 16-20, 2011
Adress for Correspondence: Gürhan Şişman, Department of Gastroenterology, İstanbul Universty Cerrahpaşa Medicine Faculty, İstanbul, Turkey
E-mail: sisman1981@hotmail.com
Received: 2.4.2012 **Accepted:** 29.5.2012

Treatment of CDHP is still controversial. The most common surgical intervention is pancreaticoduodenectomy or gastrointestinal bypass (4). Endoscopic fenestration was especially beneficial in cases with a few large cysts located superficially (5). Jouannaud et al. conducted a trial on a series of 23 patients with chronic alcoholic pancreatitis and CDHP and performed cystoduodenostomy in 2 patients; due to symptomatic relapse, surgical treatment was required for these patients at the 12th and 20th months (6).

In CDHP patients, cystoduodenostomy performed under EUS guidance may lead to successful results. This approach may prevent a major surgical operation and consequent complications.

Ethics Committee Approval: N/A.

Informed Consent: N/A.

Peer-review: Externally peer-reviewed.

Author contributions: Concept - G.S., H.S.; Design - G.S., H.S.; Supervision - Y.E., T.M.; Resource G.S., H.S.; Materials - G.S., H.S.; Data Collection&/or Processing - G.S., H.S.; Analysis&/or Interpretation - G.S., M.T., Y.E.; Literature Search - G.S.; Writing - G.S.; Critical Reviews - H.S.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

Gürhan Şişman[1], Yusuf Erzin[1], Murat Tuncer[1], Hakan Şentürk[2]

[1]Department of Gastroenterology, İstanbul Universty Cerrahpaşa Medicine Faculty, İstanbul, Turkey
[2]Department of Gastroenterology, Bezmialem Vakif University Faculty of Medicine, İstanbul, Turkey

REFERENCES

1. Lai EC, Tompkins RK. Heterotrophic pancreas. Review of a 26 year experience. Am J Surg 1986; 151: 697-700. **[CrossRef]**
2. Pessaux P, Lada P, Etienne S, Tuech JJ, et al. Duodenopancreatectomy for cystic dystrophy in heterotrophic pancreas of the duodenal wall. Gastroenterol Clin Biol 2006; 30: 24-8. **[CrossRef]**
3. Chung JP, Lee SI, Kim KW, et al. Duodenal ectopic pancreas complicated by chronic pancreatitis and pseudocyst formation-a case report. J Korean Med Sci 1994; 9: 351-6.
4. Rebours V, Levy P, Vullierme MP, et al. Clinical and morphological features of duodenal cystic dystrophy in heterotrophic pancreas. Am J Gastroenterol 2007; 102: 871-9. **[CrossRef]**
5. Beaulieu S, Vitte RL, Le Corguille M, Petit Jean B, Eugène C. Endoscopic drainage of cystic dystrophy of the duodenal wall: Report of three cases. Gastroenterol Clin Biol 2004; 28: 1159-64. **[CrossRef]**
6. Jouannaud V, Coutarel P, Tossou H, et al. Cystic dystrophy of the duodenal wall associated with chronic alcoholic pancreatitis. Gastroenterol Clin Biol 2006; 30: 580-6. **[CrossRef]**