

EUS of an atypical ectopic pancreas

Alexander Flores, Charilaos Papafragkakis, Angad S. Uberoi, Sayam Thaiudom, Manoop S. Bhutani

Department of Gastroenterology, Hepatology and Nutrition, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA

A 43-year-old woman presented with abdominal pain, nausea, and vomiting. She underwent computed tomography of the abdomen and pelvis that showed a gastric subepithelial mass. Esophagogastroduodenoscopy (EGD) revealed a smooth subepithelial mass in the fundus of the stomach, 5 cm distal to the gastroesophageal junction [Figure 1]. EUS demonstrated a homogeneous, hypoechoic 14 mm × 9.7 mm lesion, originating in the gastric submucosa [Figure 2]. The pancreas had an unremarkable endosonographic appearance. EUS-FNA was performed with a 22-gauge needle. While endosonographic appearance and location were most suspicious for gastrointestinal stromal tumors (GISTs), cytology was surprisingly consistent with an ectopic pancreas (EP).

Also known as pancreatic rest, an EP refers to pancreatic tissue in the gastrointestinal tract without any anatomical or vascular continuity with the normal pancreas. The most common site of EP is the stomach (25%–38%), followed by duodenum (17%–36%) and jejunum (15%–22%).^[1] The most common gastric location in over 95% of the cases is the antrum, primarily near the greater curvature.^[2] Similar lesions that may confound the diagnosis are GISTs, leiomyomas, lipomas, glomus tumors, and schwannomas among others.^[3] Gastric EP has been described as an elevated subepithelial nodule overlaid by

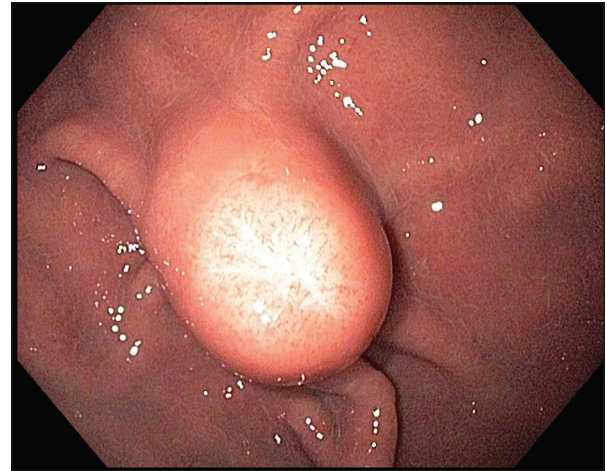


Figure 1. Smooth mass in gastric fundus

a normal mucosa, with central umbilication representing the orifice of a duct, a common feature in 35%–90% of EP cases.^[4-6] Definitive diagnosis of EP is made on histopathology. Being a subepithelial lesion, conventional biopsies during EGD are only diagnostic in about 10% of cases.^[4] Hence, EUS-FNA provides an excellent means of obtaining adequate tissue for definitive diagnosis. EP is usually found in the submucosa, but it may also involve the deep mucosa, muscularis propria, or serosa. It is typically hypoechoic with heterogeneous

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Flores A, Papafragkakis C, Uberoi AS, Thaiudom S, Bhutani MS. EUS of an atypical ectopic pancreas. *Endosc Ultrasound* 2018;7:216-7.

Access this article online

Quick Response Code:



Website:

www.eusjournal.com

DOI:

10.4103/eus.eus_111_17

Address for correspondence

Dr. Manoop S. Bhutani, Department of Gastroenterology, Hepatology and Nutrition, The University of Texas MD Anderson Cancer Center, 1515 Holcombe Blvd., Unit 1466, Houston, Texas, USA. E-mail: manoop.bhutani@mdanderson.org

Received: 2017-08-24; Accepted: 2017-10-19; Published online: 2018-04-24

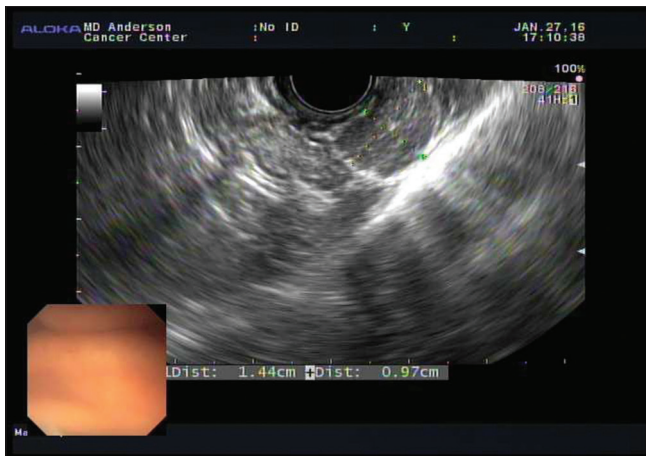


Figure 2. EUS appearance of a hypoechoic, homogeneous mass in submucosa

echotexture. An anechoic structure consistent with a duct may be seen.^[2,5,6]

The location of the EP in the gastric fundus in our case was very atypical. The lesion lacked central umbilication and was more suspicious for GIST or leiomyoma based on endoscopic and EUS appearance and location, with EUS-FNA surprisingly showing a classic EP.

Declaration of patient consent

The authors certify that they have obtained appropriate

patient consent. The patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Christodoulidis G, Zacharoulis D, Barbanis S, et al. Heterotopic pancreas in the stomach: A case report and literature review. *World J Gastroenterol* 2007;13:6098-100.
2. Attwell A, Sams S, Fukami N. Diagnosis of ectopic pancreas by endoscopic ultrasound with fine-needle aspiration. *World J Gastroenterol* 2015;21:2367-73.
3. Otani Y, Yoshida M, Saikawa Y, et al. Discrimination between gastric ectopic pancreas and mesenchymal tumours, including GIST – From 12 years' surgical experience in one institute. *Aliment Pharmacol Ther Symp Ser* 2006;2:292-6.
4. Agale SV, Agale VG, Zode RR, et al. Heterotopic pancreas involving stomach and duodenum. *J Assoc Physicians India* 2009;57:653-4.
5. Chen SH, Huang WH, Feng CL, et al. Clinical analysis of ectopic pancreas with endoscopic ultrasonography: An experience in a medical center. *J Gastrointest Surg* 2008;12:877-81.
6. Park SH, Kim GH, Park DY, et al. Endosonographic findings of gastric ectopic pancreas: A single center experience. *J Gastroenterol Hepatol* 2011;26:1441-6.