

## Ectopic pancreas mimicking submucosal gastric tumor

Amin Makni<sup>1</sup>, Wael Rebai<sup>1</sup>, Hayfa Azzouz<sup>2</sup>, Amin Daghfous<sup>1</sup>, Sofiene Ayadi<sup>1</sup>, Zoubeir Ben Safta<sup>1</sup>

(1) Departement of general surgery 'A', (2) Departement of pathology, La Rabta hospital, Jabbari 1007, Tunis, Tunisia

### To the editor,

A 35-year-old man presented with intermittent epigastric pain for about 3 months. On physical examination, the patient was in good health; bowel sounds were normal and there was no tenderness in the epigastric region; the liver and the spleen were not palpable. Laboratory findings were normal. An upper gastrointestinal endoscopy revealed a submucosal lesion overlying the mucosa of the posterior wall of the fundus. The submucosal lesion measured about 2 cm in diameter. The histopathological examination of the biopsy sample revealed chronic gastritis and mucosal hyperplasia. Biopsies collected endoscopically do not often provide the representative histological sample needed for further therapeutic decisions. Abdominal CT scan showed a polycystic gastric mass of 20 mm in diameter, without any lymphadenopathies. Endoscopic ultrasonography (EUS) identified an heterogeneous lesion (i.e. iso- to hypoechoic) with well-defined margins, located in the stomach wall and originating from within the submucosa and the muscular propria layer (fourth layer). From this information, we postulated that the patient potentially had a gastrointestinal stromal tumour (GIST). Because a malignant etiology could not be ruled out, a laparotomy approach was considered to be appropriate for a curative and definitive diagnosis. A median laparotomy was performed and intra-operative exploration showed a localized gastric submucosal tumour of 2 cm in the posterior wall of the fundus. We performed a wedge resection of the fundus of the stomach. The resection margins were clear and the specimen was sent for pathological analysis. A nasogastric tube was inserted into the stomach and a drain tube was placed near the staple line. The final pathology report revealed that the resected specimen was an ectopic pancreas (Fig. 1). The patient was discharged on day 6 post-operation with no complications. He had an uneventful recovery. After a follow-up of 12 months, the patient has not reported any abdominal pain.

Ectopic pancreas is relatively rare and is defined as abnormally situated pancreatic tissue that has its own ductal system and blood supply, with no contact with the normal pancreas (1). Most patients with an ectopic pancreas are asymptomatic, and if present, symptoms are nonspecific and depend on the site of the lesion along with their different complications (2). Epigastric pain is uncommon and seems to be due to either intussusception of the overlying gastric mucosa or due to pancreatitis (3).

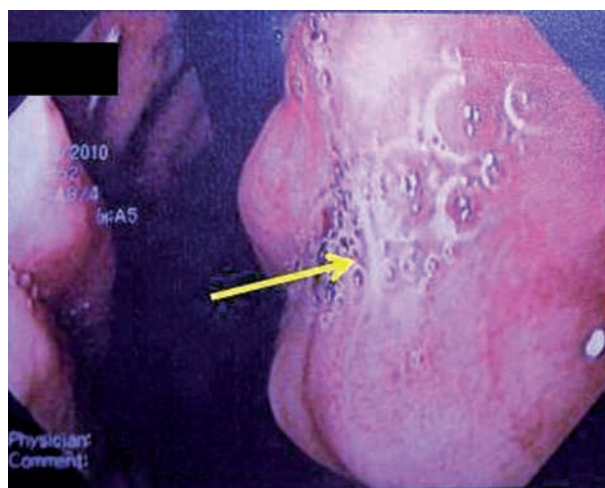


Fig. 1. — Endoscopic image shows a submucosal lesion overlying the mucosa of the posterior wall of the fundus.

In the present case, the disappearance of pain after surgical excision confirmed the causal relationship between the lesion and abdominal pain. Pancreatic abscess and the malignant transformation of ectopic pancreas have been reported (1). About 75% of all pancreatic rests are located in the stomach, duodenum, or jejunum (4). Park *et al.* (5) reported among 26 cases of gastric ectopic pancreas, 16 cases (61%) which were located in the body, and 9 cases (34%) showed an umbilication or central dimpling on the surface. In the present case, the lesion was located in the gastric fundus with normal overlying mucosa. Gastro-duodenoscopy is an indispensable tool for the investigation of patients with upper gastrointestinal symptoms, but a histologic diagnosis is usually not possible when endoscopic biopsies are obtained with a standard forceps because biopsy specimens often fail to include the tumour tissue beneath the normal mucosa. Despite its characteristic features such as central umbilication in the tumour, this condition is difficult to diag-

Correspondence to : Amin Makni, M.D., Departement of general surgery 'A', La Rabta hospital, Jabbari 1007, Tunis, Tunisia  
Tunis El Manar University, Faculty of Medicine of Tunis, 15 Rue Djebel Akhdhar. E-mail : aminmakni@msn.com

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nose endoscopically, because in tumours of less than 1.5 cm that umbilication is often absent. At EUS, ectopic pancreas is usually hypoechoic and heterogeneous with indistinct margins. It most commonly arises from the third or fourth layer, or a combination of the two layers of the gastrointestinal tract. Anechoic areas within the lesion correlate with ductal structures (6). While GISTs are more frequently seen in older people and at EUS, these tumours are typically hypoechoic, homogeneous lesions with well defined margins, although they can occasionally have irregular margins and ulcerations. Most GISTs originate from within the muscularis propria. Small lesions may originate from the muscularis mucosa (7). In our case, due to the heterogeneous image of the tumour seen on EUS, we are in favor of the diagnosis of an aberrant pancreas. For precise histologic diagnosis, endoscopic techniques for obtaining deeper specimens are indispensable, such as EUS-guided biopsy (8,9) and the technique of combined strip biopsy and bite biopsy (10). In the study reported by Matsushita et al, endoscopic removal provided the correct histologic diagnosis of aberrant pancreas in 4 cases without any complications (11). Surgical excision provides symptomatic relief and is recommended if the diagnosis remains uncertain. Ectopic pancreas should always be kept in mind when facing extramucosal gastric masses, especially in young people. A preoperative histological confirmation is recommended in order to prevent unnecessary extensive surgery.

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