

Ectopic Pancreas Tissue In The Stomach: Report Of A Case

Mide Dokusunda Ektopik Pankreas: Olgu Bildirimi

Hasan BOSTANCI¹, Ali Cihat YILDIRIM¹, Göktürk GürSOY¹, Celal DİLEKTASLI¹,
Hülagü KARGICI¹

¹ MD, Department of General Surgery, Diskapi Yıldırım Beyazıt Training and Research Hospital General Surgery Clinic, Ankara, Turkey
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Abstract

We report a case of a 55 year old woman that has epigastric pain and was admitted to our clinic in order to investigate submucosal gastric solid mass that has appeared in upper gastrointestinal system (GIS) endoscopic examination. Her surgical pathology is reported as ectopic pancreatic tissue on stomach. The differentiation of ectopic pancreas from other submucosal tumors is difficult. Frozen section is very helpful to establish the diagnosis during surgery in order to avoid unnecessary extensive operations.

Keywords: ectopic pancreas, gastric heterotopia, stomach.

Özet

55 yaşında epigastrik ağrısı olan bayan hastanın üst gastrointestinal sistem endoskopisinde submukozal gastrik solid kitle saptanması üzerine araştırılmak üzere servisimize yatırılı yapıldı. Patoloji sonucu midedeki ektopik pankreas dokusu ile uyumlu geldi. Ektopik pankreasın diğer submukozal tümörlerle ayrımı zordur. Cerrahi sırasında frozen inceleme gereksiz ve aşırı operasyonlardan kaçınmak için yararlı bir tetkiktir.

Anahtar Sözcükler: ektopik pankreas, gastrik heterotopi, mide.

Introduction

Heterotopic or ectopic pancreas is the presence of an abnormality located focus of normally developed pancreatic tissue outside the boundaries of the orthotropic pancreas without anatomical or vascular connections¹. In normal embryologic development of the pancreas, endodermal dorsal and ventral pancreatic primordia arise from the duodenum of the 3 mm or 4 mm embryo. The dorsal anlage is derived from the upper and posterior aspect of the duodenum. The ventral anlage arises from the lower anteromedial aspect at the junction of duodenum and the common bile duct. Ectopic

pancreatic tissue arises during the fusion of the dorsal and ventral pancreatic buds in embryonic development². The origin of ectopic pancreas is controversial and none of the various theories is universally accepted³. Heterotopic pancreas is usually found incidentally and is generally asymptomatic. Occasionally ectopic pancreatic mass can become symptomatic depending on the size, location and histopathological changes.

Complications of heterotopic pancreas are secondary to histopathological changes or caused by mass effect⁴. Among its complications, dyspeptic symptoms, acute or

chronic pancreatitis, gastric and duodenal obstruction, gastrointestinal bleeding due to ulceration, malignant degeneration and cyst formation have been reported .¹

Case Report

We report a case of a 55 year old woman with dyspepsia. She had no complaints before the admission. The patient had mild anemia in complete blood count. Upper GIS examination revealed a 3-4 cm mass in stomach; between corpus and antrum along the lesser curvature. Antrum was also edematous and hyperemic. Upper GIS endosonography confirmed about a 23x18mm submucosal lesion derived from muscularis propria. There was neither calcification nor necrosis. Seroza was intact. The patients was hospitalized for a gastrointestinal stromal tumor originated from stomach.

On abdominal tomography there was a 2.5x2 cm sized lesion with regular contours. On exploratory laparotomy; 4x4 cm sized lesion on the posterior wall of the stomach was revealed. Wedge resection was performed. Frozen section examination showed that this lesion was ectopic pancreatic tissue (Fig. 1-2). Postoperative period was uneventful. The patient was discharged postoperatively on the seventh day.

Discussion

The incidence of ectopic pancreatic tissue is reported to be 1% to 2% in autopsy series. Seventy percent of cases occur in the stomach, duodenum and jejunum². The most common ectopic location is the stomach in %25-% 38 of the cases. Antrum is involved in 85-95% of the cases, being more common along the greater curvature. Lesions are more frequently located in the submucosal layer⁵. Ectopic pancreas is defined as pancreatic tissue that lacks either anatomical or vascular communication with the normal body of the pancreas and pancreatic acinar formation, duct development and presence of islets of Langerhans⁶. Although gastric lesions tend to be larger; lesions are usually solitary that measure 3 cm or less in diameter¹. Generally conventional imaging studies are not informative; making it difficult to diagnose preoperatively¹.

Barium swallow study may show a typical image of rounded filling defect with central indentation. Upper GIS endoscopy may demonstrate a broad based umbilicated submucosal lesion. In the majority of cases, biopsies are superficial and non diagnostic, however; positive biopsies can establish the diagnosis. Endoscopic ultrasonography has proven to be a

useful adjunct in identification of pancreatic rests localized in the submucosa, ranging 0.5-2 cm⁵. Most lesions are heterogenous, mainly hypoechoic or mixed in echogenicity⁷. The combination of endoscopic ultrasonography with fine needle aspiration allows cytological evaluation of submucosal gastrointestinal lesions with a sensitivity ranging 80-100%⁵. Computed tomography (CT) findings are usually nonspecific. Multislice spiral CT can demonstrate the lesion which enhances similarly with the normal pancreatic tissue, but cannot distinguish ectopic pancreas from other submucosal tumors⁵. In the present case, we performed a frozen section biopsy to diagnose the submucosal lesion on stomach.

The differentiation of ectopic pancreas from submucosal tumors is difficult. The diagnosis may be difficult intraoperatively due to macroscopic similarity with gastrointestinal stromal tumors, gastrointestinal autonomic nerve tumors (GANT), carcinoid tumors, lymphoma or gastric carcinomas. In unclear cases; frozen section is very helpful to establish the diagnosis during surgery. This approach can avoid unnecessary extensive operations⁵.

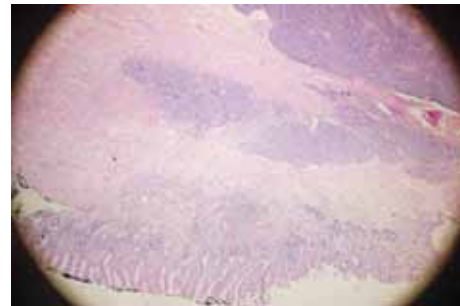


Figure 1. 4x10 HE section demonstrate muscularis propria of the stomach-lobulated pancreatic tissue consisting of ductal and aciner tissues.

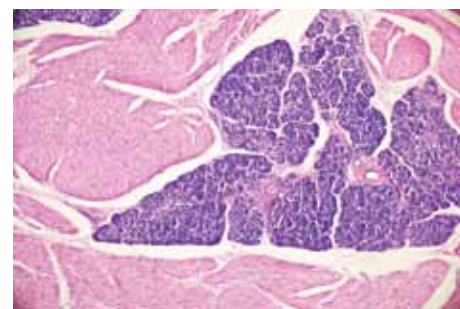


Figure 2. 20x10 HE section demonstrate muscularis propria of the stomach-lobulated pancreatic tissue consisting of ductal and aciner tissues. It is also seen Langerhans islet tissue amongst.

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Correspondance to:

Ali Cihat YILDIRIM M.D.

Turkish Ministry of Health, Ankara Diskapi
Yildirim Beyazit Training and Research Hospital

Phone: +903123435459

Fax: +903123186690

e-mail: dralicihat@yahoo.com.tr