A Case of Heterotopic Pancreatic Tissue at the Gastroesophageal Junction

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Introduction

We report a rare case of quite large and symptomatic heterotopic pancreas (HP) located at the GE junction which was incidentally discovered during EGD.

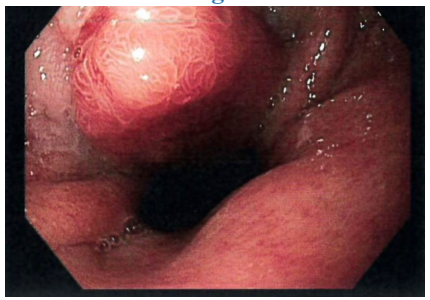
Case Presentation

A 45-year-old male presented for a gastroenterology consultation for heartburn and irregular bowel habits. The patient reported recent heartburn around two days per week especially upon consumption of spicy foods. He had been using Meloxicam 3 times a week. He also reported around 3 loose bowel movements per day for the last 10 years.

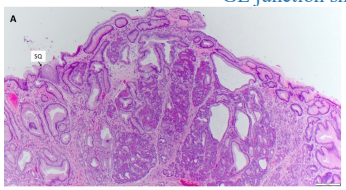
Laboratory evaluation revealed normal stool pancreatic elastase, negative stool ova and parasites, normal thyroid stimulating hormone, normal complete blood count, negative HIV testing, and positive tissue transglutaminase (tTG) antibody at 34.

An esophagogastroduodenoscopy was performed which showed a 2 cm nodule distal to the gastroesophageal (GE) junction that was removed with a hot snare, gastric antral erythema, and normal duodenum. Pathology from the GE junction nodule was consistent with heterotopic pancreatic tissue. The gastric biopsies were consistent with chronic active gastritis and the duodenal biopsies were negative for celiac disease.

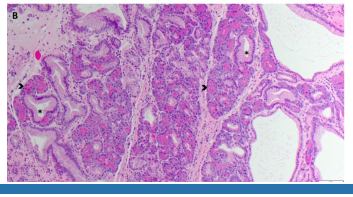
Images



GE junction showing two-centimeter nodule.



A: Pancreatic heterotopia/metaplasia is the lobular structure within the lamina propria in this biopsy from the gastroesophageal junction; a small focus of esophageal squamous epithelium (SQ) is seen (hematoxylin and eosin stain, x40).



B: Pancreatic acinar cells (arrowhead) have deeply eosinophilic granules and ductal cells (*) have pale cytoplasm (x100).

Discussion

Heterotopic pancreas (HP) (pancreatic rest or ectopic pancreas) is a congenital anomaly in which there is ectopic pancreatic tissue indicating that it is separate from the main pancreatic gland, and does not have any continuity (anatomic, vascular, or ductal) with the main pancreatic gland. HP is generally found in the stomach, duodenum, or proximal jejunum. It has been seen in other locations such as the esophagus, ileum, and Meckel's diverticulum (1). The prevalence of HP is believed to be 0.55 to 13.7% on autopsy, 0.2% to 0.5% in abdominal operations, and 0.9% of gastrectomies (1). It is more commonly reported in adult males and the incidence peaks from the fourth to sixth decades of life (2). It is uncommon to find HP in the esophagus with only nineteen cases being reported in literature (3).

Symptomatic HP located at the GE junction is rare with only six cases being reported in literature (3, 4, 5, 6, 7). When present at the GE junction, symptoms that have been reported in literature include dysphagia due to mass effect, symptoms of heartburn, or epigastric pain. The endoscopic appearance is usually a well-circumscribed submucosal lesion commonly with central "umbilication" covered by normal mucosa. The endoscopic differential diagnosis includes carcinoid tumor, lymphoma, or gastrointestinal stromal tumors. The management includes conservative management with observation, resection of the HP, or esophagectomy.

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