

Ectopic Pancreas of Infringing Localization

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Abstract

A 48-year-old female patient, who is consulting for presenting episodes of heartburn and epigastralgia, since two years ago. In the digestive endoscopy, a submucosal lesion of 1 cm was observed in the high gastric body. The endoscopic ultrasound showed a lesion in relation to the submucosa layer echo, mixed echogenicity with a tendency to hypoechogenicity of 0.77 cm. We performed an endoscopic resection of the lesion, reporting the histopathology, ectopic pancreas.

Ectopic pancreatic tissue is a rare congenital anomaly. Although most are asymptomatic, they may present symptoms similar to those that occur in any pancreatic disease. Typically, it is located in the gastric antrum, its location being exceptional in other places.

Keywords: *Ectopic Pancreas; Gastric Body; Endoscopic Ultrasound*

Introduction

The ectopic pancreas (EP) is a congenital anomaly, characterized by the presence of ectopic pancreatic tissue that has no anatomical or vascular contact with the pancreas. Its incidence in autopsies is variable (1 - 15%) [1] and there is 1 case per 500 upper gastrointestinal surgeries [2].

It was first described in 1727, by Schultz, in a diverticulum in the ileum, but the first histological confirmation was made by Klob in 1859 [3]. The most common locations are stomach (95% gastric antrum), proximal duodenum and jejunum. Most are asymptomatic, but they become symptomatic when complications such as inflammation, bleeding, obstruction and transformation to malignancy appear [4].

Case Report

We present the case of a female patient, 48 years of age, with a history of dyslipidemia and arterial hypertension; who consults for presenting, episodes of pyrosis and epigastralgia, of two years of evolution. Upon interrogation, she denies any warning signs and reports that he has received medical treatment with partial improvement, since at the end of the medication, symptoms reappear. It was decided to perform upper digestive endoscopy, which shows a mild erosive gastropathy in the antrum and in the upper gastric body at the level of the lesser curvature, consisting of a submucosal lesion measuring 1 cm in diameter (Figure 1). Endoscopic ultrasound is performed, where it is evident, lesion 0.77 cm in diameter, in relation to submucosal layer echo, mixed echogenicity with a tendency to hypoechogenicity (Figure 2).



Figure 1: Upper digestive endoscopy: high lesion in the upper gastric body, covered by normal mucosa, measuring 1 cm.

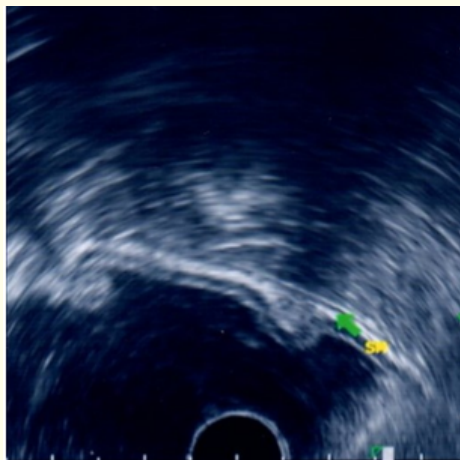


Figure 2: Endoscopic ultrasound: echo-dependent lesion submucosal layer, mixed echo with tendency to hypoechogenicity, measures 0.77 cm.

Taking this result into account, endoscopic resection of the lesion is planned, which is performed without complications (Figure 3 and 4). The histopathology of this lesion, reports groups of pancreatic acini, which form a nodule in the submucosa of the gastric body, confirming the diagnosis of ectopic pancreas (Figure 5).

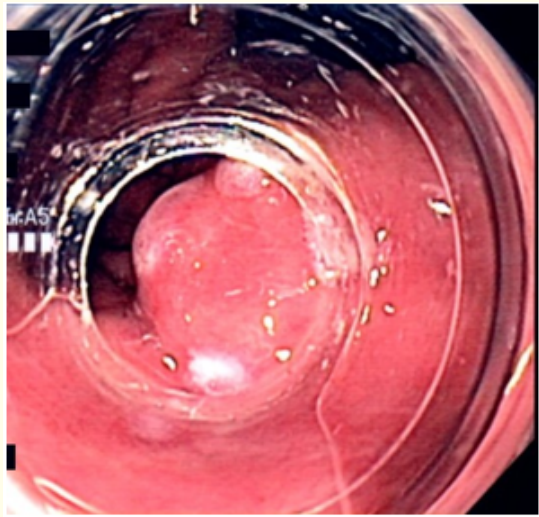


Figure 3: Endoscopic resection



Figure 4: Endoscopic resection post.

Discussion

Multiple theories have been proposed regarding the origin of the EP. The most accepted is that suggests that the alteration occurs because small fragments of embryonic pancreatic tissue are separated and implanted in an ectopic location. This fact occurs just at the stage of embryonic rotation of the foregut and fusion of the dorsal and ventral parts of the pancreas [5].

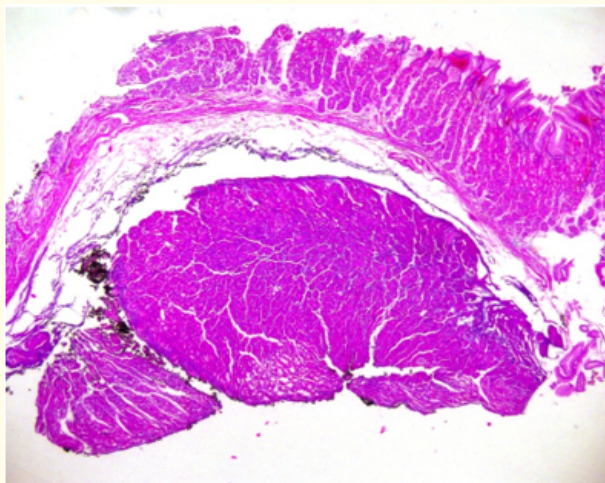


Figure 5: Group of pancreatic acini organized as a nodule in the gastric body submucosa.

It can occur at any age, but its highest incidence is between the 5th and 6th decade of life. It is more frequent in men [6].

The most frequent location is the gastrointestinal tract; mainly in the stomach in 25 to 38% of the cases and, of these, 95% are located in the antrum, 17 to 21% in the duodenum and 15 to 21% in the proximal jejunum [7]. The main differential diagnoses are: gastrointestinal stromal tumors, leiomyoma, lymphoma, gastric polyps, peptic ulcer and accessory spleen. Recent studies have shown that with endoscopy techniques, direct visualization of pancreatic tissue is possible through a tunnel at the level of the submucosa. This procedure has shown excellent results, since it allows the EP to be distinguished from other tumors with malignant potential, thus avoiding additional diagnostic procedures and unnecessary surgeries [8]. Other less frequent locations are liver, bile duct, spleen, omentum, mesentery, Meckel's diverticulum, mediastinum, lung and brain [9].

Most are asymptomatic and constitute casual findings during surgery or in an imaging or endoscopy study. It must be taken into account that any pathology that affects the pancreas can appear in the ectopic pancreatic tissue [10] and its symptoms often depend on its location.

The malignancy index is low, 1.8% [11]. There are about 30 reported cases of adenocarcinoma development from EP [1]

There is no specific diagnostic method for EP. In barium studies, a filling defect with a rounded appearance is observed, with a central depression corresponding to a rudimentary pancreatic duct, which is present approximately 50% of the time. In endoscopy, there is evidence of a high, well defined submucosal lesion. As in barium studies, in half of the cases, a central depression occurs. Because of its location, the diagnosis is rarely confirmed with samples obtained with a biopsy forceps and frequently it is confused with gastrointestinal stromal tumors [12].

Currently, the role of computed tomography and endoscopic ultrasound to differentiate EP from other submucosal tumors has become more relevant [13].

The definitive diagnosis is histopathological. Currently, the Gaspar Fuentes classification is used, which divides EP into 4 types: type 1, composed of acini, ducts and islets similar to those observed in the pancreatic tissue of usual location; type 2, composed only of pipelines; type 3, composed only of acini and; type 4, composed only of islets [14]. Surgical or endoscopic resolution should be considered when EP produces symptoms or is an incidental finding during surgery, as long as its size is greater than 3 cm; this in order to prevent complications. Another indication for EP resection is diagnostic confirmation in case of insufficient biopsies or suspicion of malignancy [11].

Conclusion

The ectopic pancreas is a rare entity, which carries a diagnostic challenge, as there are no pathognomonic characteristics of it. The advent of endoscopic ultrasound, facilitates differentiation, with lesions of similar characteristics. The predominant location is the gastrointestinal tract (antrum), there are very few cases reported in the gastric body. Given the diagnostic suspicion of a lesion with risk of malignancy, resection is the appropriate behavior, as it happened in our case and the definitive diagnosis is given by histopathology.

Ethical Responsibilities

Protection of people and animals

We declare that no experiments have been conducted on humans or animals for this research.

Confidentiality of the data

The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent

The authors declare that patient data does not appear in this article.

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Conflict of Interests

The authors declare that they have no conflicts of interest.

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