Case Report

Ectopic pancreas: producing gastritis and low weight

Pâncreas ectópico: provocando gastrite e baixo peso

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ABSTRACT: Ectopic pancreas is a rare congenital anomaly represented by a cluster of aberrant pancreatic tissue outside its natural anatomical place seen at any time in life. The most frequent location is the duodenum or gastric tissue. Its clinical manifestations are nonspecific and can make diagnosis difficult. Pancreatic ectopy can also be seen in other organs or extraabdominal regions, for example, in the lung, mediastinum and umbilicus. The incidence of ectopic pancreas in necropsy findings ranges from 0.6 to 5.6%. The author reports the case of a patient with ectopic pancreas located in the gastric antrum and reviews the literature.

Keywords: Pancreas; Insulinoma; Laparotomy; Abdominal neoplasms; Pancreatitis.

INTRODUCTION

E ctopic pancreas is a rare congenital anomaly, first reported in 1727 by Jean Schultz and only in 1859 was it studied and histologically described by Klob.

The ectopic pancreas, also called in the literature as aberrant, accessory, heterotopic, supernumerary or pancreatic remnants, can appear in any intra-abdominal location, being found most frequently in the entire gastrointestinal tract, where it appears with greater incidence in the stomach (30%), duodenum. (25%), jejunum (15%), ileum (5%), Meckel's diverticulum (5%), appendix (2.5%) and less frequently in the hepatobiliary system (2.1%), epiplon (1, 7%), spleen (1%) and in the

RESUMO: O pâncreas ectópico é uma anomalia congênita rara representada por um aglomerado de tecido pancreático aberrante fora de seu lugar anatômico natural, visto em qualquer época da vida. A localização mais frequente é o duodeno ou tecido gástrico. Suas manifestações clínicas são inespecíficas e podem dificultar o diagnóstico. A ectopia pancreática pode ser vista também em outros órgãos ou regiões extra-abdominais como, por exemplo, no pulmão, mediastino e no umbigo. A incidência do pâncreas ectópico em achados de necropsias varia entre 0,6 a 5,6%. O autor relata um caso de um paciente com pâncreas ectópico localizado no antro gástrico que provocava sintomatologia gastrointestinal associado a baixo peso e faz uma breve revisão da literatura.

Palavras-chave: Pâncreas; Insulinoma; Laparotomia; Neoplasias abdominais; Pancreatite.

mesentery (0.4%)⁴. Pancreatic ectopia can also be seen in other organs or extra-abdominal regions, such as the lung, mediastinum and umbilicus⁴. The incidence of ectopic pancreas in necropsy findings ranges from 0.6 to 5.6%¹.

The aim of this publication is to present a case of pancreatic ectopia and to make a brief review of the literature.

CASE REPORT

A 24-year-old male, white, was referred to the surgery outpatient clinic, referred by another unit, for evaluation and the possibility of surgical intervention, after being followed up for three years with recurrent

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dyspepsia and low weight, associated with the presence of a small umbilicated mass, approximately 1.5 cm in diameter, located in the gastric antrum, approximately 6 cm from the pylorus (Figure 1), which was identified as an ectopic pancreas, whose biopsies performed by endoscopic approach were inconclusive.



Figure 1- Videoendoscopic view of the ectopic pancreas 06 cm from the pylorus.

The patient reported that since he was very young, he presented gastric discomfort of low to moderate intensity and, associated with this, he never achieved a significant weight gain.

Approximately three years ago, the symptoms became more frequent and severe, when he sought a specialized service and underwent upper digestive endoscopy with biopsy of the lesion.

He started to be followed up by the gastroenterology service of the unit of origin, using medication and endoscopic control of the lesion, improving the condition with few recurrences, but in the last six months, he evolved with worsening symptoms, several hospitalizations with abdominal pain , nausea and vomiting, reaching the loss of eight kilos in the period.

He underwent exploratory laparotomy with gastrostomy, and an umbilicated lesion was located which, when manipulated, expelled a whitish secretion, coming from a tiny orifice in the center of the lesion, which did not present characteristics of malignancy, but was fixed in deep planes (Figure 2). The lesion was removed en bloc, reaching all layers.

The patient evolved well, without complaints or complications, being discharged from the hospital on the 8th POD.

The surgical specimen was sent for anatomopathological examination, which revealed on microscopy that the sections of the stomach wall showed intact mucosa. In the submucosa, they observed foci of pancreatic tissue represented by serous acini and ducts surrounded by smooth muscle without atypia, compatible

with ectopic pancreas of the stomach wall.

During the outpatient reviews, the patient did not report any dyspeptic symptoms, having discontinued the medication he used routinely on his own and has been for 18 months without any type of recurrence, referring only to weight gain.



Figure 2 – Exteriorized ectopic pancreas, showing central pancreatic duct.

DISCUSSION

There is a great deal of discussion regarding the origin of the ectopic pancreas and most authors believe that it is an embryonic anomaly that occurs with the ventral lateral precursors (right and left) that give rise to the pancreas. Lorely thinks that there was no complete regression or atrophy of the left ventral precursor¹.

Warthin hypothesizes that it is an accessory tissue that forms alongside the rudimentary pancreatic ducts as they penetrate the intestinal wall¹. Hogan states that during the rotation of the organs, the stomach, mesentery and intestine come into contact with the precursors of the pancreas and at that moment this tissue can be fixed and form the ectopic pancreas¹.

Pancreatic ectopia is more frequent in males with a ratio of 3:1 and usually presents symptoms between the fourth and fifth decade of life³.

When found in the stomach, it is most frequently located in the antrum, there is approximately 5 to 6 centimeters from the pylorus, and it can also be found in the submucosa of the anterior or posterior wall³'s. Morphologically, it presents as a small, single sessile nodule, with a diameter ranging from 1 to 5 centimeters, rarely pedunculated and with a central umbilication that corresponds to the anomalous drainage duct to the stomach³'s.

According to most authors, the ectopic pancreas can present the same complications as the topical pancreas, such as cystic formation, necrosis, pancreatitis and hemorrhages, in addition to rare events such as intussusception, intestinal obstruction, insulinoma, and especially malignant degeneration, which exists rare cases in the world literature well documented. The fact that many believe that the ectopic pancreas has more malignant potential than the pancreas itself, this entity becomes of great importance.

When located in the stomach, it can present dyspepsia, epigastralgia, vomiting and bleeding, and in general it presents poor symptoms and, in some cases, the diagnostic suspicion is made after the appearance of complications²'s. The differential diagnosis should be made with leiomyoma, lipomas, neurogenic tumors, gastric neoplasia, leiomyosarcoma, gastric varices, among others⁴.

In general, laboratory tests do not show any changes that may indicate the presence of pancreatic ectopia. Contrast radiological study and upper digestive endoscopy are the exams most involved in the diagnosis of this pathology. Endoscopic biopsy is not always conclusive, as most of the time the lesion is located in the submucosa². The diagnosis can be more accurate through echoendoscopy, which, in addition to allowing the previous study of the lesion, allows to delimit the depth and define the degree of invasion, as well as allowing the puncture with a fine

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needle, to collect cytological material for analysis.

Regarding treatment, opinions differ, and some prefer clinical treatment with endoscopic follow-up, while others recommend surgical treatment, based on the various complications that may occur.

Surgical treatment can be performed endoscopically or laparoscopically⁴. In some cases where there is suspicion of a malignant disease or unavailability of technical resources, exploratory laparotomy may be indicated.

In the case presented here, the patient underwent exploratory laparotomy, due to the worsening of symptoms, associated with significant weight loss and the great doubt generated by the natural difficulty that the pathology presents regarding the certainty of the diagnosis of ectopic pancreas without malignant degeneration.

Most authors recommend that when pancreatic tissue is found in the perioperative period, a frozen section biopsy should be performed, proceeding in benign cases only with simple excision and in malignant cases with a broader resection. When frozen section biopsy is unavailable, it is prudent to proceed with a more extensive resection, as performed in the case reported here.

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