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Gastrointestinal bleeding as debut presentation of solid pseudopapillary pancreatic tumor

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ABSTRACT:
Solid pseudopapillary pancreatic tumor is a rare entity with low malignant potential and good prognosis that mainly affects young women. The clinical manifestations are nonspecific, most are asymptomatic, and gastrointestinal bleeding, as in the case presented, is rare.

KEYWORDS: Solid pseudopapillary pancreatic tumor. Gastrointestinal bleeding.

INTRODUCTION

Solid pseudopapillary pancreatic tumor is a rare entity with low malignant potential and good prognosis that mainly affects young women. The clinical manifestations are nonspecific, most are asymptomatic, and gastrointestinal bleeding, as in the case presented, is rare.

CLINICAL CASE

A 26-year-old woman with no relevant medical history came to the emergency room with a history of dark stools that had been present for a week. She denied abdominal pain, vomiting or other symptoms. The only abnormality in the laboratory tests was microcytic anaemia in the transfusion range. An urgent gastroscopy was performed, revealing exophytic tissue with active bleeding in the theoretical location of the duodenal papilla (*Figure 1*), which was sclerosed with adrenaline. An urgent computed tomography (CT) scan was performed, identifying a predominantly solid mass, located at the biliopancreatic crossroads, with no signs of radiological aggressiveness and with doubtful organ dependence on the head-neck of the pancreas or the duodenum (*Figure 2*); the differential diagnosis of duodenal GIST, pancreatic/duodenal neuroendocrine tumour and solid pancreatic pseudopapillary tumour was proposed. The study was completed with endoscopic ultrasound (EUS) (*Figures 3 and 4*) with fine-needle aspiration (FNA), magnetic resonance cholangiopancreatography (MRI) and MRI of the pancreas without clarifying the diagnosis. Finally, the tumor was resected by cephalic duodenopancreatectomy, and the pathology of the surgical specimen was compatible with solid pseudopapillary pancreatic

neoplasia.

DISCUSSION

Solid pseudopapillary pancreatic tumor is a rare pancreatic neoplasm that usually occurs in young women between 20 and 40 years of age. It has a low malignant potential due to its low probability of metastasis and vascular invasion.

The main clinical characteristics are nonspecific, such as abdominal pain and fullness, with gastrointestinal bleeding being an extremely rare manifestation. Most are asymptomatic, with incidental radiological findings being frequent.

Diagnosis is by imaging tests such as CT or MRI that show a heterogeneous encapsulated round mass with a mixed cystic and solid appearance, with calcifications being frequent. Differential diagnosis would include pancreatic neuroendocrine neoplasms, serous cystic neoplasm, cystadenoma, pancreatic lymphoma, papillary mucinous carcinoma, pancreatic pseudocyst and teratoma.

As for definitive diagnosis, it is made by anatomopathological analysis, in some cases confirmed by EUS-guided FNA, while in others it is necessary to analyze the surgical specimen. It is essential to be familiar with its unique microscopic characteristics, and how to differentiate it from other localized pancreatic neoplasms, particularly neuroendocrine tumors.

Finally, the treatment of choice is complete surgical resection with curative intent, associated with a long-term survival rate of 95%, although follow-up is recommended to diagnose local recurrences and distant metastases.

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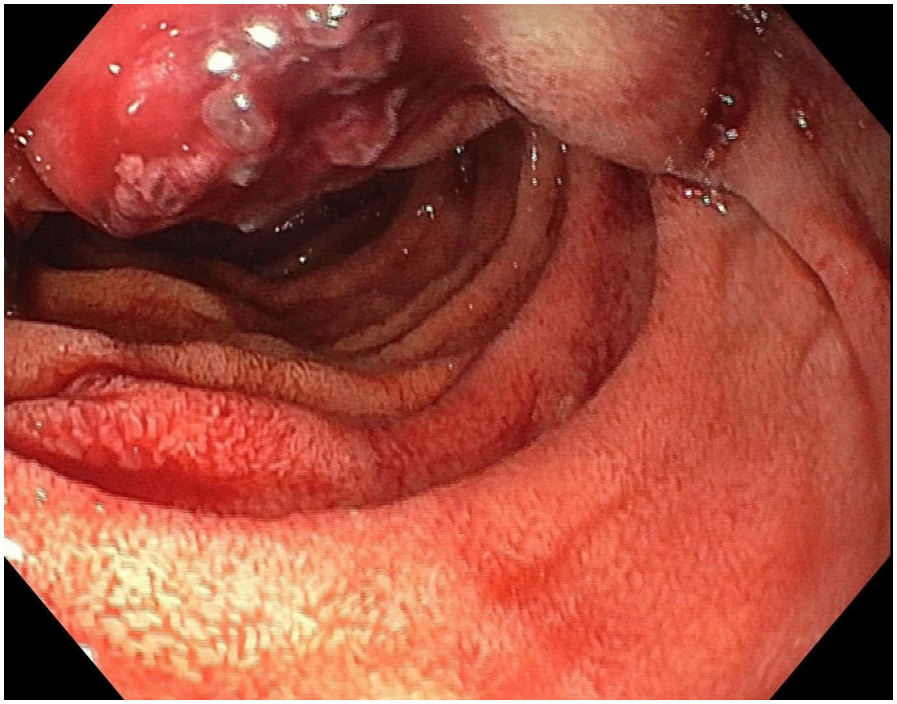

Figure 1: Endoscopic image of the 2nd duodenal portion showing exophytic tissue with active bleeding in drooling in the theoretical location of the duodenal papilla.

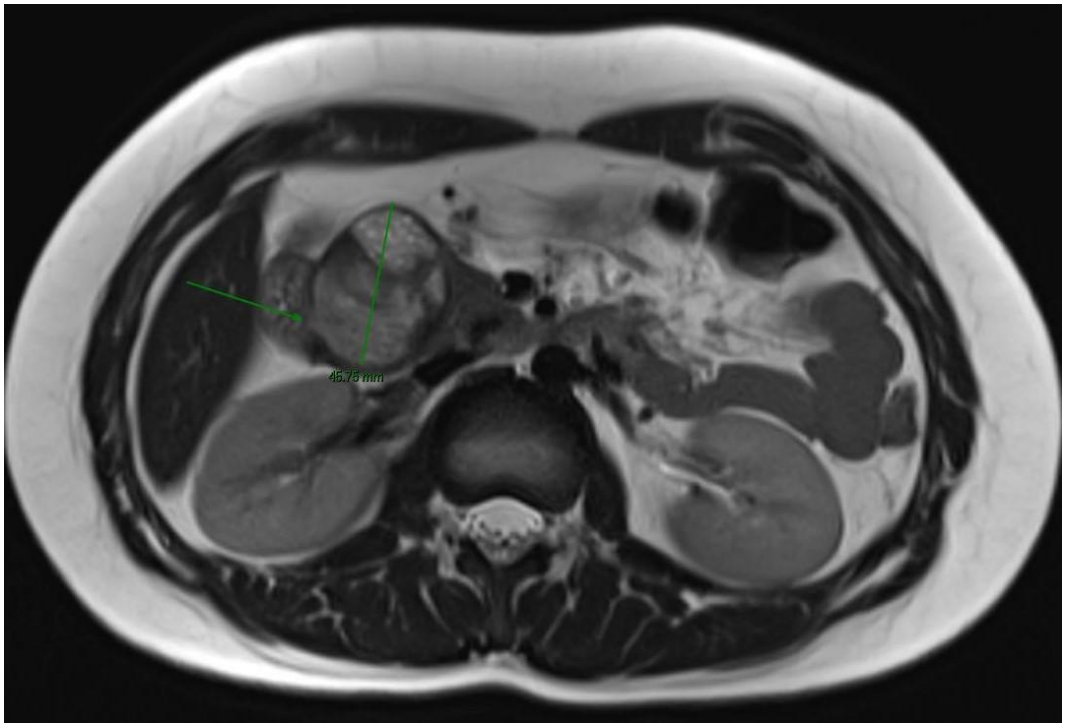

Figure 2: Mass located at the level of the biliopancreatic junction, with ovoid morphology, with well-defined margins, measuring approximately 4.6 x 4 x 4.3 cm (AP x T x CC). Doubtful solution of continuity with the medial wall of the second duodenal portion, with markedly exophytic growth.

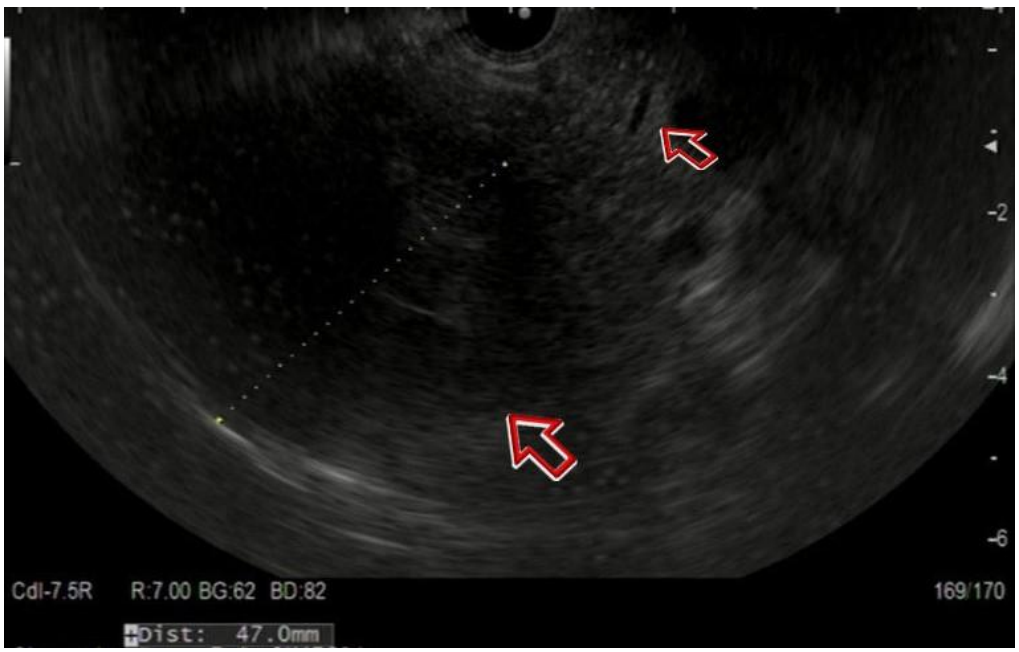

Figure 3: Endoscopic ultrasound image of a large, encapsulated, iso-hypoechoic, heterogeneous mass, without clear organ dependence, adjacent to the head of the pancreas.

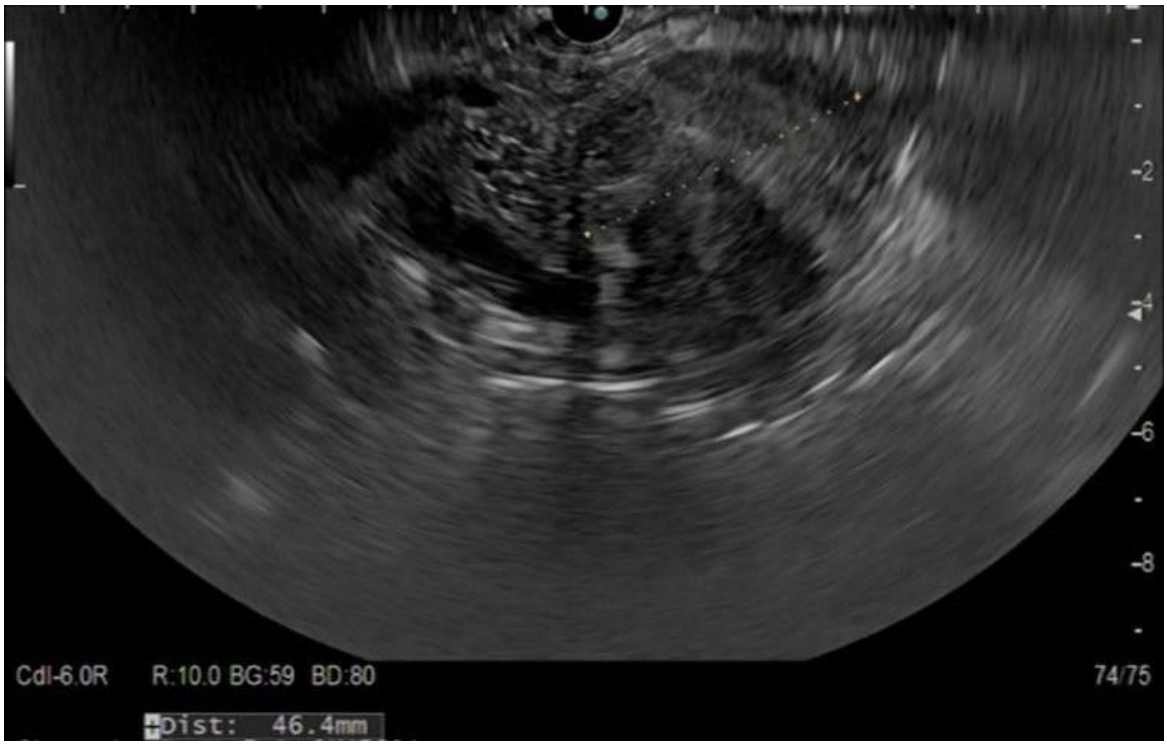

Figure 4: Endoscopic ultrasound image of a large, encapsulated, iso-hypoechoic, heterogeneous mass, without clear organ dependence, adjacent to the head of the pancreas.