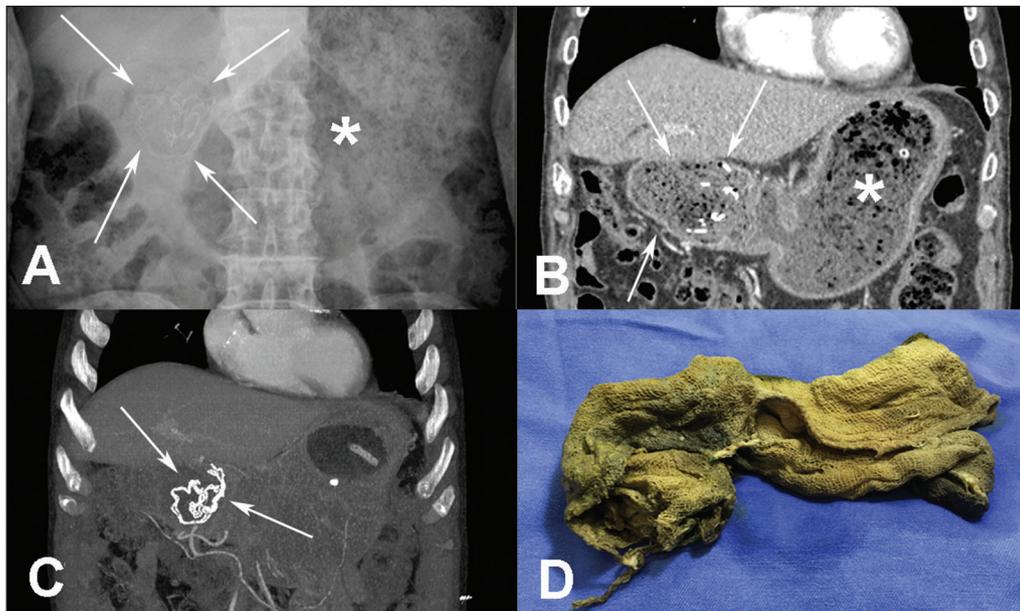


**Figure 1. A:** Conventional X-ray of the abdomen (with the patient in supine position) showing marked gastric distention (asterisk) and material containing hyperdense serpiginous lines in the region of the first portion of the duodenum (arrows). **B,C:** Contrast-enhanced coronal CT scan of the abdomen (**B**), with maximum intensity projection (**C**), confirming the X-ray findings and better characterizing the intraluminal mass in the duodenum (arrows) as heterogeneous, containing gas and dense linear structures, as well as showing thickening of the gastric wall and duodenal bulb. **D:** Surgical specimen showing a compress (gossypiboma) impregnated with biliary content (greenish-yellow coloring).



and air, with a spongiform appearance. On contrast-enhanced CT scans, there can be edge enhancement, which is likely attributable to inflammation of the wall adjacent to the mass. A high-density capsule with a low density core is found in the majority of cases, making it difficult to distinguish between abscesses and hematomas. Calcification is a rare finding and is more common in long-standing cases<sup>(5)</sup>.

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#### The main radiologic findings in annular pancreas

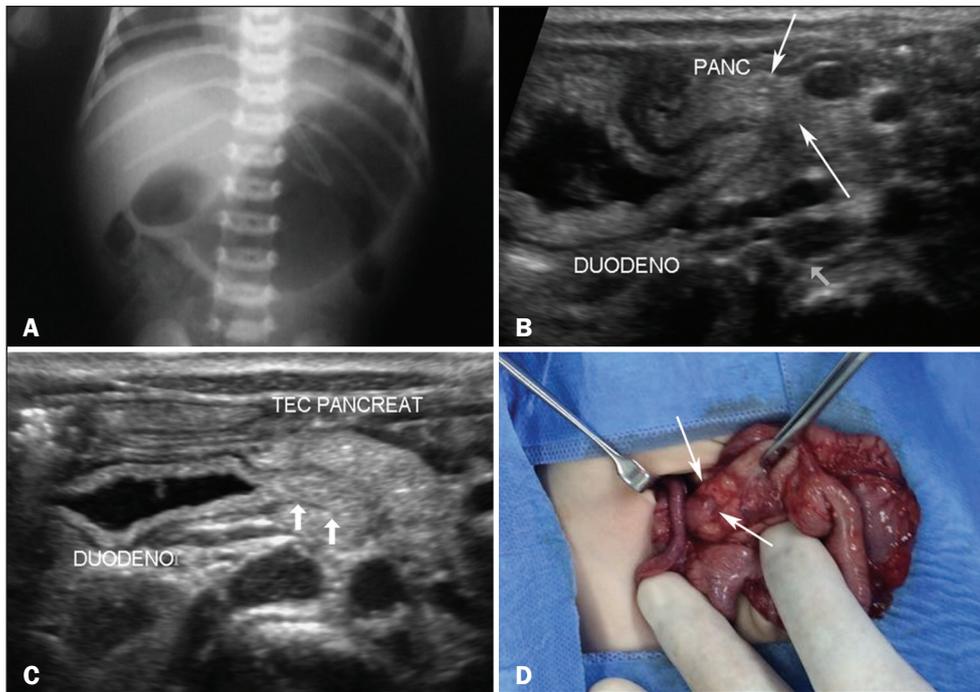
Dear Editor,

A female infant was born at term without complications. At 12 days of life, she presented to a pediatric emergency department for investigation of frequent postprandial vomiting, weight loss, and irritability. According to the mother, she was eliminating urine and feces. Physical examination revealed abdominal distention. The laboratory findings were consistent with iron-deficiency anemia. An X-ray of the abdomen showed gaseous distention of the stomach and proximal duodenum, without gas in the distal portion, characterizing the typical double-bubble sign (Figure 1A). The findings were suggestive of duodenal obstruction. Abdominal ultrasound confirmed the X-ray findings, revealing distention of the stomach and duodenum. In addition, the ultrasound showed tissue surrounding the duodenum, suggesting a diagnosis of annular pancreas as the cause of the duodenal obstruction (Figures 1B and 1C). The patient underwent exploratory laparotomy, during which the diagnosis of duodenal

obstruction caused by an annular pancreas was confirmed (Figure 1D). A diamond-shaped duodenoduodenostomy was performed, and the postoperative evolution was favorable.

Acute abdominal conditions are the subject of a number of recent studies in the radiology literature<sup>(1–4)</sup>. Congenital duodenal obstruction is relatively common during the neonatal period. It can be categorized as complete or partial and as intrinsic or extrinsic. Extrinsic duodenal obstruction has many causes, including annular pancreas, malrotation, and anterior portal vein<sup>(5)</sup>.

Annular pancreas is a rare congenital malformation, characterized by the development of a band of pancreatic tissue that completely or partially surrounds the second duodenal portion, resulting in varying degrees of obstruction<sup>(6)</sup>. Its embryological origin begins between the fifth and seventh gestational weeks, when the two pancreatic buds (dorsal and ventral) rotate as part of the process of intestinal rotation<sup>(6,7)</sup>. During that period, the duodenum rotates from left to right, the ventral pancreatic bud typically migrates posteriorly and inferiorly, merging with



**Figure 1.** **A:** X-ray of the abdomen, showing gas distention of the stomach and duodenum, with little gas seen distally, characterizing the double-bubble sign. **B,C:** Ultrasound of the abdomen, showing pancreatic tissue (arrowheads in **B**) partially surrounding the duodenum (arrows in **C**). **D:** Photograph, obtained during laparotomy, confirming the presence of the pancreatic tissue (arrows) surrounding the duodenum.

the more caudal portion of the pancreatic head and the uncinate process, and the dorsal bud develops into the body and tail of the pancreas<sup>(6)</sup>. An annular pancreas is due to failure of the ventral bud to rotate, resulting in incarceration of the duodenum<sup>(7)</sup>. In general, an annular pancreas is symptomatic in children, especially in the neonatal period<sup>(5)</sup>, the main symptoms being bilious vomiting and abdominal distention<sup>(6)</sup>. In adults, it is typically asymptomatic and is diagnosed as an incidental finding<sup>(5,8)</sup>.

An abdominal X-ray of a patient with an annular pancreas will show the double-bubble sign, indicative of duodenal obstruction. Ultrasound, which is the first-line examination in the investigation of abdominal pain in children, reveals a fluid-distended duodenum and can identify the second duodenal portion incarcerated by pancreatic tissue. On computed tomography, pancreatic tissue surrounding the duodenum can also be seen<sup>(9)</sup>. In most cases, endoscopy is also performed. However, it should be borne in mind that even if the radiological and endoscopic findings both suggest an annular pancreas, the definitive diagnosis is established only during surgery. In patients with symptoms of obstruction, laparotomy can reveal a band of pancreatic tissue surrounding the second portion of the duodenum, supporting the diagnostic hypothesis, which can be confirmed by examining the resected specimen<sup>(6)</sup>.

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**Primary essential cutis verticis gyrata**

Dear Editor,

A 53-year-old woman was admitted to the emergency room with a three-day history of self-reported fever and diffuse headache. She reported no history of surgical interventions. On physical examination, her overall health status was satisfactory.

However, a cutaneous mass, rich in sulci but without secretions, was observed in the right parietal region (Figure 1A). Computed tomography of the skull showed right-sided cutaneous thickening in the parietal, temporal, and occipital regions, with diffuse microcalcifications, mimicking the appearance of cerebral gyri. The cranial vault and cerebral parenchyma were unaffected (Figure 1B). Three-dimensional reconstruction provided a better