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An atypical gastric duplication cyst as a rare cause of gastric dilatation: the key role of the endoscopy ultrasound

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Dear Editor,

A 13 yrs old boy, with no comorbidities, was admitted to the Pediatric Unit presenting epigastric pain nausea and vomiting. Blood tests were normal at admission. An abdominal US (fig.1A) was performed as first diagnostic work-up and a marked dilation of the stomach was found. Therefore, a naso-gastric tube was positioned in order to drain the cavity and then an upper GI endoscopy

was performed (figure 1B). A 5 cm in diameter, subepithelial mass was found in the posterior part of the antrum, mimicking a stenosis of the gastric lumen.

A subsequent endoscopic ultrasound (EUS) characterized better the origin of the bulging mass and an anechoic oval shape with linear margins originating from the submucosal layer was found (figure 1C). EUS-guided aspiration of the cystic liquid allowed us to obtain a biochemical examination that showed a huge incrementation of amylase 8.827 UI/L (normal value 28-100) and lipase 49549 UI/L (normal value 7-39).

In order to study the mass better an abdominal CT (figure 1D) was requested and finally, the patient underwent laparoscopic surgery and the mass was removed through a wedge resection.

Gross Histology of the lesion (figure 1E) confirmed a gastric duplication with ectopic pancreas.

Discussion

Enteric duplication cysts are rare congenital anomalies that can be found anywhere along the gastrointestinal tract (1). Clinical manifestations are variable, depending on site and size of the duplication.

Up to 10% of gastric duplications may contain ectopic pancreatic tissue which may lead to pancreatitis and mimic a pancreatic pseudocyst (2).

The EUS permits the diagnosis and the aspiration of the internal liquid relieving the acute symptom of the patient and showing the importance and utility of that procedure. However cystic fluid analysis cannot exclude malignancy and surgical resection is advisable for definitive treatment (3).

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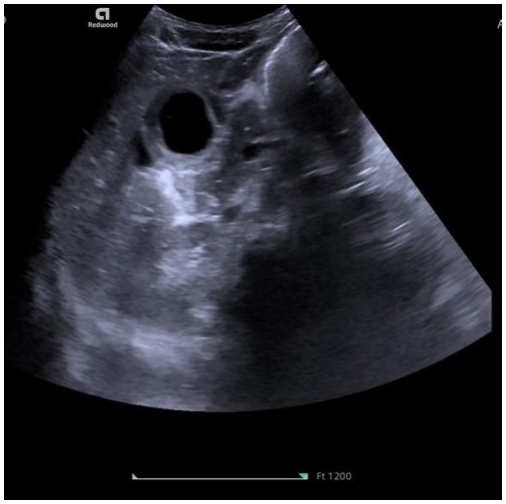

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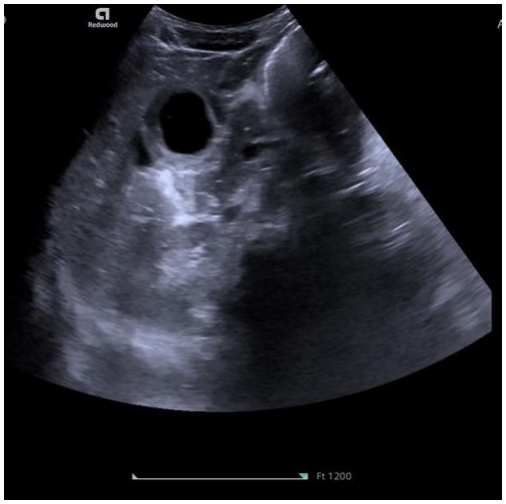
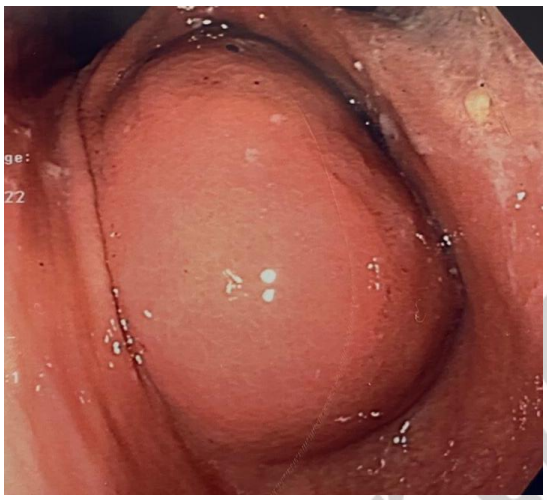


1A



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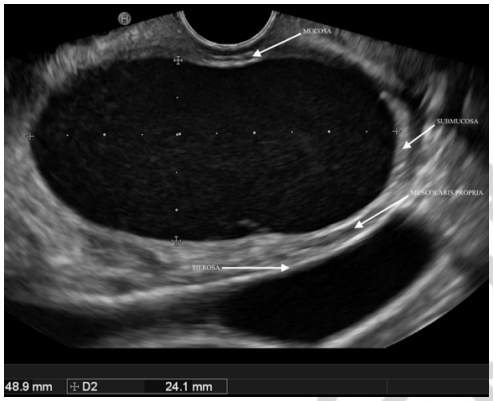

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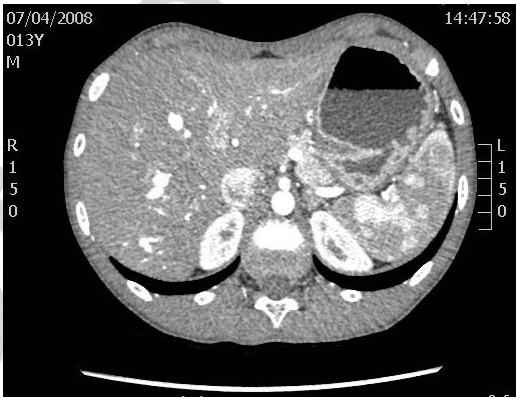

1D

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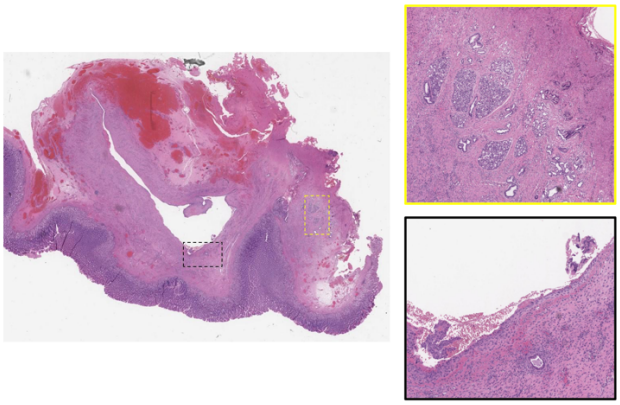

1E

Figure 1: A. Abdominal US. B. Endoscopic subepithelial-mass in the antrum. C. EUS image. D. CT image. E. Gastric wall showing submucosal cyst consisting of smooth muscle wall and extensively de-epithelialized epithelial lining. The black inset shows the cyst wall with inflammation and bleeding areas. The yellow inset shows the coexistence of heterotopic pancreatic tissue.