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A CASE REPORT AND REVIEW OF LITRATURE OF GASTRIC DUPLICATION CYST

Surgery

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ABSTRACT

Gastrointestinal (GI) duplication cysts are a rare congenital disease. They may involve any level of the alimentary tract, but they most commonly involve the ileum, esophagus, and jejunum. Gastric duplication cysts represent approximately 4–8% of GI duplication cysts, the majority of which present in early childhood. We present a rare case of gastric duplication cyst in a 10-year-old male found to have abdominal mass on diagnostic laparoscopy. There are several potential methods to diagnose gastric duplication cyst and treatment of choice is complete surgical resection.

KEYWORDS

1.INTRODUCTION

Gastrointestinal duplication is defined as a spherical structure, with a muscular coat lined by a mucous membrane [1]. They can be found anywhere in the gastrointestinal tract, from the base of the tongue to the anus, most commonly occurring in the ileum (35%). Gastric duplication cysts are a rare phenomenon and account for only 2—9% of all gastrointestinal duplications They can be found anywhere in the stomach, with the majority being located on the greater curvature. [1]. The majority is circular, communicating and surrounded by a smooth muscular coat. Gastric duplication cysts are rarely diagnosed in the adult population and occur more commonly in young children, who may present with symptoms of abdominal pain, gastric outlet obstruction or a palpable abdominal mass [2, 3].

Clinically important ectopic tissues can include gastric, duodenal and pancreatic tissues, as demonstrated in our case report.

2. Case presentation

The patient is 10 year old male with no previous surgical or medical history ,with no significant family history , presented to our institute with chief complain of abdominal pain since 5 days and also complain of vomiting, pain is located in right upper quadrant and pain exacerbated by food. The patient also reported increased postprandial fullness followed by multiple episodes of nausea and emesis.

On examination, routine blood tests and plain chest radiographs were unremarkable. The patient underwent diagnostic evaluation by computed tomography (CT),findings are suggestive of chronic appendicitis .

For confirmation we plan diagnostic laparoscopy in which found a cyst like structure which is suggestive of gastric duplication cyst ,and we do exploratory laparotomy for surgical excision.

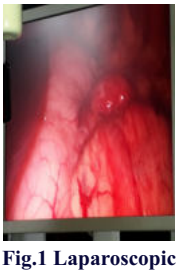

Fig.1 Laparoscopic view gastric duplication cyst.

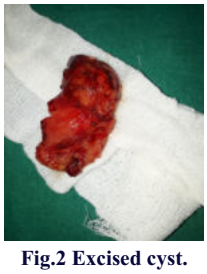

Fig.2 Excised cyst.

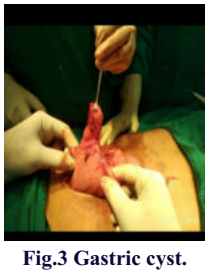

Fig.3 Gastric cyst.

DISCUSSION

Duplication of the gastrointestinal tract is a rare congenital anomaly.

Most Common Site: Alimentary tract duplication cysts most frequently affect the ileum (35%), the esophagus (19%), the jejunum (10%), the stomach (9%) and the colon (7%) (1).

In 35% of patients, GDCs coexist with other congenital abnormalities such as annular or heterotopic pancreas, or vertebral anomalies such as spina bifida (2).

Most common occur in females compared to males (8:1), with the majority of cases being diagnosed in the pediatric population

Common Age Group: The first 3 months of life is common presentation and rarely after 12 years of age [2 3]. Preoperative workup can include abdominal ultrasound, CT scan, magnetic resonance imaging and more recently endoscopic ultrasound [4, 5]. Although gastric duplication cysts are a rare entity, they can present with a multitude of symptoms.

Patient Ppresentation

Adult patients can present with abdominal pain, nausea, vomiting, dysphagia, dyspepsia, abdominal distention and potentially anemia [6].

Weight loss can also occur secondarily to abdominal pain .

A very small subset of patients can remain asymptomatic.

Hemorrhage, perforation, malignancy or complete gastric outlet obstruction can occur based on location or type of ectopic tissue present.

Treatment Modalities

Multiple treatment modalities have been reported in the literature including enucleation, formation of cystgastrostomy and even endoscopic removal . The mainstay of treatment is surgical excision of the cyst [2].

Complete excision is recommended not only for symptomatic relief as seen with a gastric outlet obstruction, but also because of the risk of malignant degeneration.

Though rarely reported, there have been at least 14 cases of adenocarcinoma diagnosed in gastric duplication cysts after resection in the English literature [10].

If malignant transformation is suspected, surgical resection is the treatment of choice.

CONCLUSION

In conclusion, although rare, gastrointestinal duplication cysts are unique entities that are often detected after significant growth with development of compressive symptoms. They are often diagnosed postoperatively by careful pathologic examination, and treatment of choice is complete surgical resection.

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