

A Case of Adult Gastric Duplication Cyst Simulating a GIST on Imaging Studies

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Abstract: Gastric duplication cysts in adults are rare congenital anomalies and comprise about 2–9% of all gastrointestinal duplication cysts. They are often overlooked due vague symptoms. Majority of the cases are reported in children .We present a rare case of gastric duplication cyst in a 65 year old female.

Keywords: pyloric antrum, duplication cyst, mild dysplasia, congenital

1. Introduction

Gastrointestinal duplication cysts are rare congenital disease. They are usually hollow, spherical, tubular structures, with well-developed smooth muscle coats, lined by mucosal epithelium. They develop prior to complete differentiation of gastrointestinal epithelium and as such are often named after their organ of association. [1, 2] On consideration of the fact that these cysts are usually asymptomatic or, in any case, have no specific signs and symptoms, diagnosis is frequently made post-operatively (3). Gastric duplication cysts (GDC) comprise about 2–9% of all gastrointestinal duplication cysts and most are located in the greater curvature [4] .

2. Case Report

Our case is a 65 year old female with vague abdominal pain and loss of appetite .CT scan abdomen revealed an ill defined partially exophytic lesion measuring 2.1 cm in the pyloric antrum of stomach in greater curvature possibly GIST [fig 1].

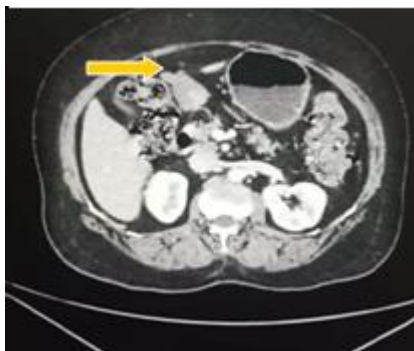


Figure 1

Subsequently the patient undergone laparoscopic wedge resection of the lesion. The gross pathologic examination showed a firm whitish nodular lesion with a central slit like space [fig2&3]. The microscopy of stomach showed a lesion in the muscular layer with a central slit like space lined by gastric mucosa with one focus showing mild dysplasia, which in turn was surrounded by muscular layers. The space was not communicating with the lumen of stomach and a diagnosis of gastric duplication cyst was made [fig 4 & 5].



Figure 2



Figure 3

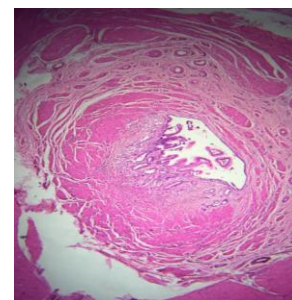


Figure 4

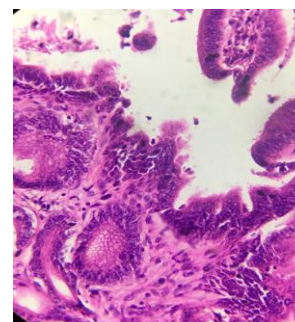


Figure 5

The patient recovered uneventfully and was relieved of symptoms.

3. Discussion

Gastrointestinal duplication cysts are rare congenital anomalies found primarily in children with majority occurring in ileum and rare in stomach. [5] Approximately 67 per cent of gastric duplication cysts are identified within the first year of life. It is very rare in adults, Kremer et al. described 9 cases, with only one adult patient [6] Duplication cysts in adults are generally asymptomatic and encountered as incidental findings at endoscopy or laparotomy [7]. Established criteria for diagnosis of gastric duplication cyst include the wall of the cyst being contiguous with the stomach wall, the presence of smooth muscle surrounding the cyst and in continuation with the gastric musculature, and lining of the cyst wall by epithelial, gastric, or gut mucosa of any type.[8]

Most gastric duplications are localised along the greater curvature. They may have a cystic or tubular configuration and may or may not communicate with the gastric lumen. Since GDC has the potential for neoplastic transformation, it is recommended that duplication cysts be surgically excised when found.[9] But there is some controversy regarding management[10]. Some authors favor conservative treatment because malignant transformation of these lesions is rare, whereas others prefer complete surgical resection even in asymptomatic patients to avoid the risk of complications such as obstruction, torsion, perforation, hemorrhage, and malignancy. [10]The diagnosis of GDC is challenging in majority of cases and diagnosis is usually made during surgical resection or by pathologic examination. On CT scan/MRI study, it is often misdiagnosed as soft tissue masses/solid tumors [10]. Our case also diagnosed as GIST by CT scan

4. Conclusion

GDC may present with vague symptoms and in radiologic examination it can easily mistaken for a soft tissue tumour of GIT So we should keep high degree of suspicion to reach an accurate diagnosis allowing appropriate treatment with total surgical resection of the lesion, when possible, avoiding future complications including malignant tumors.

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