

GIANT GASTRIC DIVERTICULUM- AN INCIDENTAL CT FINDING OR A GRAVE COMPLICATION?

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ABSTRACT

We report the case of 74 years old male Hepatitis C patient who presented to the civil hospital Karachi with history of repeated episodes of haematemesis, epigastric pain, abdominal fullness, bloating and generalised malaise for 1 year. His Alpha fetoprotein levels were 1100 ng/mL; he was suspected of having hepatocellular malignancy, therefore underwent Triphasic CT of the abdomen. Apart from demonstration of multicentric hepatoma, a giant gastric diverticulum (8.8 x 12.0 cm- CCxAP dimensions) at pyloric region was incidentally seen at the CT scan. The presence of gastric diverticula in the antrum, prepyloric or pyloric region is extremely rare. To the best of author's knowledge, a huge pre-pyloric gastric diverticulum has not been reported previously in the literature.

Key words: gastric diverticulum, Computed tomography, CT.

Introduction

Gastric diverticula are sac-like projections that usually originate from the gastric fundus, most commonly on the posterior surface.¹ They are the least common gastrointestinal diverticulum. Gastric diverticula are rare and commonly detected incidentally. The incidence varies from 0.01% to 0.11% at endoscopy studies.² These are usually asymptomatic. In some cases they may present as a vague sensation of fullness immediately after meals or as gastric discomfort.² They may be congenital (true diverticula that have all layers of the gastric wall) or acquired (false diverticula) and arise virtually anywhere along the stomach.³ We present a rare case of giant prepyloric gastric diverticulum on CT scan.

Case Summary

A 74 years-old asian male, a known case of hepatitis C for last 20 years, presented in 2017 to civil hospital with complaints of severe epigastric pain, haemate-

mesis, abdominal fullness, bloating and generalised malaise for 1 year. His Alpha fetoprotein levels were 1100 ng/mL. Sonography of the liver demonstrated multiple lesions of variable echogenicity in both lobes of liver with coarse hepatic parenchyma. He underwent Triphasic CT Liver, for the confirmation of hepatocellular carcinoma. The Triphasic CT of liver was performed on 16 slice Toshiba Activion Spiral scanner with scanning parameters of 120 KV, 150mA and 5mm slice thickness; images were obtained in pre and post contrast phases in multiple planes. Computed tomography demonstrated coarse architecture of the liver with irregular outline. There were multiple ill-defined heterogeneously enhancing lesions seen in segment IVb, VI, VII and VIII, largest in segment IVb measures 2.5 x 2.0 cm. Coexistent gross ascites, left pyelonephritis and multiple lung abscesses were also noted. Apart from these findings, a large thin walled cyst (Fig. 1 and 2) measuring 8.8 x 12.0 cm (CCxAP dimensions) was incidentally seen in lesser sac showing air - contrast level and communication with gastric pyloric region at its posteromedial wall through a narrow neck measuring 0.7 cm.

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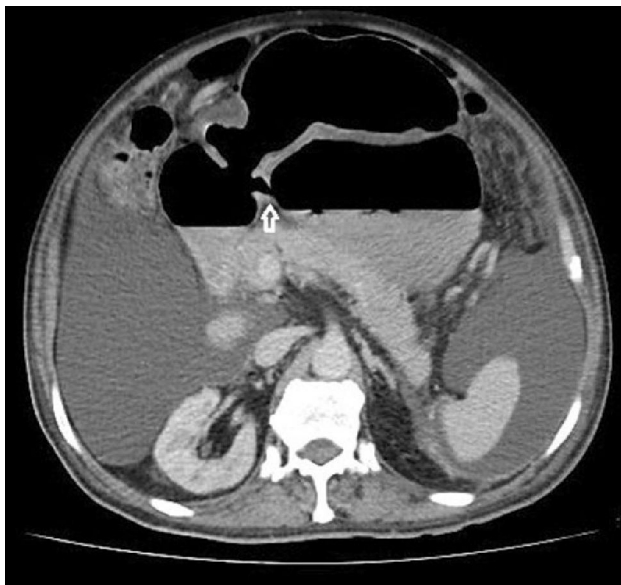


Figure 1: Contrast enhanced CT axial section showing gastric diverticulum in the lesser sac communicating with gastric antrum (white arrow).

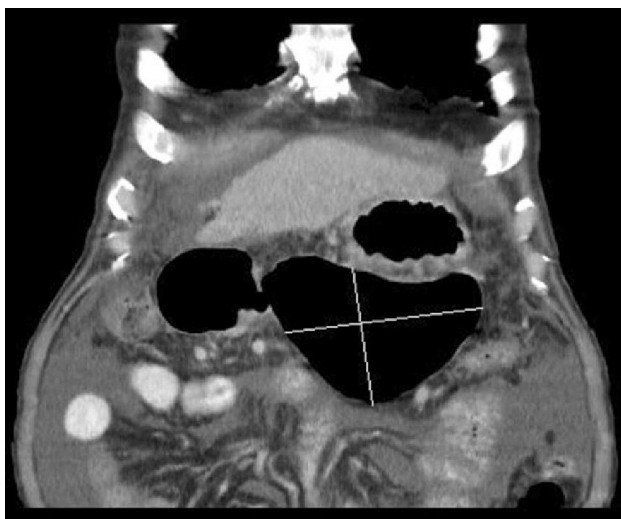


Figure 2: Contrast enhanced CT coronal section showing gastric diverticulum.

Discussion

Gastric diverticula (GD) are an uncommon form of diverticular disease. In 1986, Schwartz AN⁴ et al presented a 3 x 3 cm gastric diverticulum simulating an adrenal mass and described its appearance on CT. In 2002, Rodeberg DA and his colleagues⁵ studied gastric diverticulum in a case series on four pediatric patients and compared the symptoms, upper GI series findings of endoscopy, surgery, and histopathology, however none demonstrated GD at pyloric region.


In 2012, 'A review on gastric diverticulum' by Rashid F et al⁶ showed that seventy-five percent of true gastric diverticula were located in the posterior wall of the fundus of the stomach, 2 cm below the oesophagogastric junction and 3 cm from the lesser curve. False diverticula were either traction or pulsion and associated with inflammation, other diseases, or both. Diverticula were usually less than 4 cm in size (range, 3 cm to 11 cm).

In 2013, Marano L et al⁷ mentioned two case reports on large symptomatic gastric diverticula and emphasized that surgical resection is the mainstay of treatment when the diverticulum is large, symptomatic or complicated by bleeding, ulceration, torsion, hemorrhage, perforation or malignancy.⁸

For our patient, the surgical opinion was taken and laparoscopic surgical resection was planned, but the patient was considered unfit for surgery, as he has deranged clotting profile and ongoing multi-organ infection. Therefore, he was kept on conservative management.

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