

Extremely rare cause of extrinsic compression of the stomach during esophagogastroduodenoscopy

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QUESTION

A 49-year-old male patient was admitted to an internal medicine outpatient clinic with chief symptoms of weakness, vague abdominal pain, feeling of incomplete defecation, and weight loss. He had type 2 diabetes mellitus and had been taking oral antidiabetic since 2 years. His mother was diagnosed with colon cancer 2 years ago. There was no obvious finding on physical examinations. However, his laboratory tests revealed anemia with Hb levels of 9.3 g/dL and Htc value of 29.5.

The patient underwent full endoscopy scans. In the lower gastrointestinal scan, there was an ulcero-vegetan mass in the middle part of the descending colon. Upper gastrointestinal endoscopy findings revealed a pulsatile mass at corpus in the direction of great curvature causing extrinsic compression (Figure 1). Besides, an enhanced thoracoabdominal computed tomography (CT) was obtained.

What is your diagnosis?



Figure 1. Extrinsic compression at corpus in the great curvature direction measures about 1 cm.



Figure 2. Asymmetric wall thickness with concentric lumen narrowing at descending colon accompanying millimetric lymph nodes and neighborhood fat tissue heterogeneity.

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ANSWER

CT examination shows a narrowing segment at descending colon accompanying asymmetric wall thickness compatible with the mass detected by endoscopy (Figure 2). Splenic artery was extremely tortuous and this tortuosity caused extrinsic compression at the distal part of the great curvature (Figure 3). CT findings showed the reason for pulsatile mass.

DISCUSSION

Extrinsic compression during esophagogastroduodenoscopy is generally located at the proximal part of the stomach. It is usually related to normal anatomic structures (79.5%). The most frequently compressed area is the posterior wall side of the corpus (1). Vascular reasons, mostly aneurysms, are one of the causes of extrinsic compression (2).

The splenic artery has a 10% tortuous retropancreatic course, and this tortuosity is generally seen at the level of pancreatic and prepancreatic segments (3-5). Tortuosity can be in the form of irregular curves, spirals, or loops. However, highly tortuous loops are very rare. It is completely or partially covered by the pancreas (3).

In our case, the splenic artery had a tortuous course with a loop located near to the distal part of great curvature, which caused a prominent extrinsic compression. To our best knowledge, this is the first case of extrinsic compression to stomach due to tortuous splenic artery forming loops.

In conclusion, vascular reasons can form extrinsic compression to stomach. There is a high risk of hemorrhage during the biopsy procedure during esophagogastroduodenoscopy. Thus, diagnosis of vascular reason is very important. Additional imaging methods especially CT could be very useful in the diagnosis.

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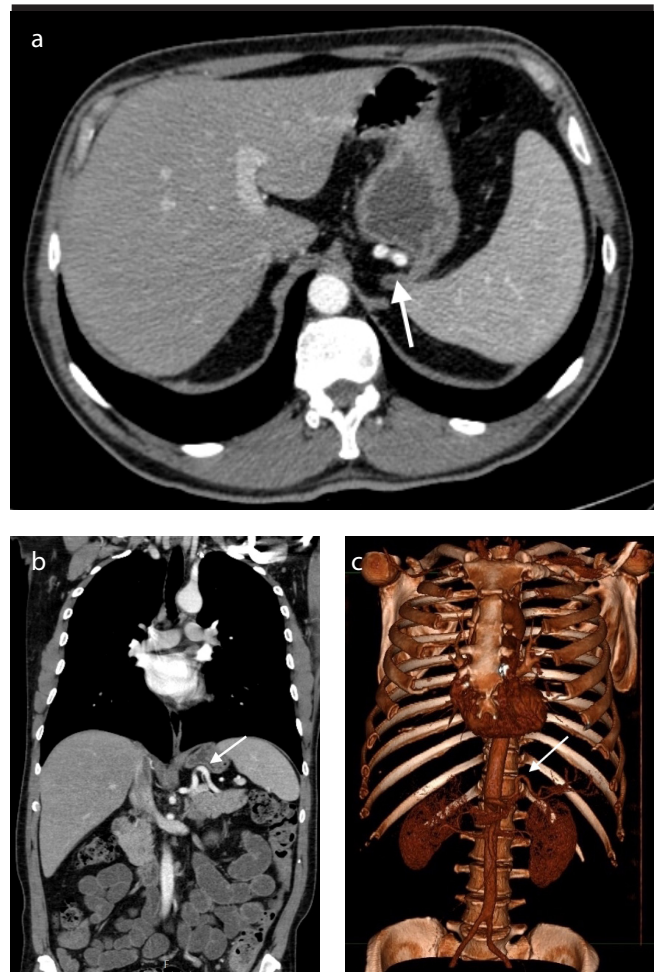


Figure 3. a-c. Axial b. Coronal CT images representing arterial loop of tortuous splenic artery at the distal part of great curvature (Arrow). c. 3D reformatted CT image showing loop of tortuous splenic artery (Arrow).

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