

Paraumbilical Varix Masquerading as a Gastric Submucosal Nodule in Decompensated Liver Cirrhosis

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CASE REPORT

A 34-year-old man was admitted with alcoholic cirrhosis complicated by portal hypertension and blood loss anemia secondary to hematemesis. He denied any abdominal pain, and clinical examination showed no signs of abdominal tenderness, distension, ascites, or caput medusae, which would have ordinarily warranted a computed tomography (CT) scan of the abdomen.

After the patient was stabilized with no concern for a recurring bleed, an esophagogastroduodenoscopy (EGD) revealed grade 1 esophageal varices, moderate portal hypertensive gastropathy, and a 4 cm smooth luminal gastric body mass mimicking a gastrointestinal stromal tumor, a common submucosal lesion (SML) or nodule, as shown in Figure 1. On-site endoscopic biopsy of the gastric body mass was deferred because of concerns of the ambiguous presentation of ectopic varices and the patient's anemic state. This avoided possible iatrogenic rupture of any ectopic varix and life-threatening hemorrhage.

Abdominal CT was alternatively ordered to assess for extrinsic gastric wall compression. The CT revealed a 40 mm aneurysmal dilatation of a periumbilical varix adjacent to the gastric antrum (Figure 2). Informed consent for coil embolization of the varix was obtained, and follow-up revealed regression of the varix (Figure 3).

Ectopic varices such as paraumbilical varices arise in almost 14% of cirrhotic patients but are often underreported.¹ They can have an ambiguous presentation both clinically (eg, possible venous hum, caput medusae, abdominal pain, distension, anemia, or ascites) and endoscopically (external compression of gastric wall mimicking a gastric SML).^{1,2}



Figure 1. (A and B) Upper GI endoscopy showing gastric body mass (4 cm, well-circumscribed, luminal projecting, flesh tan-colored, smooth surface) mimicking a submucosal nodule. GI, gastrointestinal.



Figure 2. (A and B) Axial and coronal abdominal CT scans with contrast showing 40 mm aneurysmal dilatation of a periumbilical varix adjacent to the gastric body. CT, computed tomography.

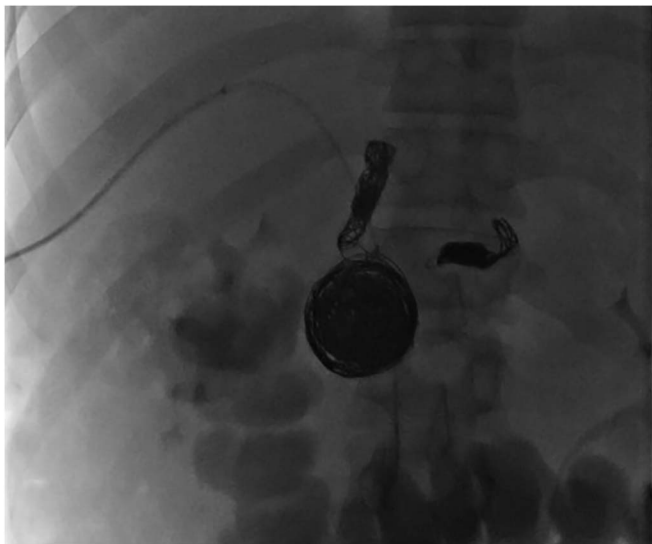


Figure 3. Venogram obtained immediately after coil embolization of paraumbilical varix.

Gastric SMLs are also often asymptomatic and appear as smooth luminal projecting flesh tan-colored masses on EGD.³ Most SMLs are gastrointestinal stromal tumors, which have a high malignant potential (especially if >4 cm) and require endoscopic biopsy. However, the likelihood of detecting them on routine EGD is only 0.36%; hence, biopsy of suspected SMLs should be deferred until other etiologies have been ruled out.⁴

Ectopic varices should be suspected in cirrhotic patients with portal hypertension where endoscopy fails to locate the source of upper gastrointestinal bleed.² Many studies suggest that patients with small esophageal varices (grade 1 varix) were associated with a larger ectopic varix (4 cm) to offset the portal venous pressure.¹

Intravenous contrast-enhanced multislice CT is the gold standard for the diagnosis of ectopic varices, which appear as well-defined, rounded, tubular, or serpentine structures with homogeneous attenuation (Figure 2).⁵ Coil embolization or

sclerotherapy by interventional radiology techniques can achieve successful outcomes in varix regression and patient recovery (Figure 3).²

DISCLOSURES

Author contributions: The primary team that cared for this patient and reviewed this manuscript included M. Vennikandam, M. Phipps, and E. Zheng. T. Varghese and G. Varghese reviewed the literature and drafted the manuscript/image submission. T. Varghese is the article guarantor.

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Informed consent was obtained for this case report.

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