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IMAGE | ENDOSCOPY

Inverted Meckel's Diverticulum with Intussusception and Ulceration Diagnosed after Rectal Double-Balloon Enteroscopy

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CASE REPORT

A 24-year-old man was admitted for abdominal pain and obscure overt gastrointestinal bleeding. The patient had several episodes of hematochezia, and his hemoglobin level dropped to 5.7 g/dL. Initial esophagogastroduodenoscopy and colonoscopy after transfusion of 3 units of blood and fluid resuscitation were negative. The patient reported a lifelong history of intermittent episodes of diffuse abdominal pain, frequently accompanied by nausea and vomiting, which was associated with mild iron-deficiency anemia. Past investigations included upper endoscopy, colonoscopy, magnetic resonance imaging of the abdomen, and a Meckel's scan, all of which were negative.

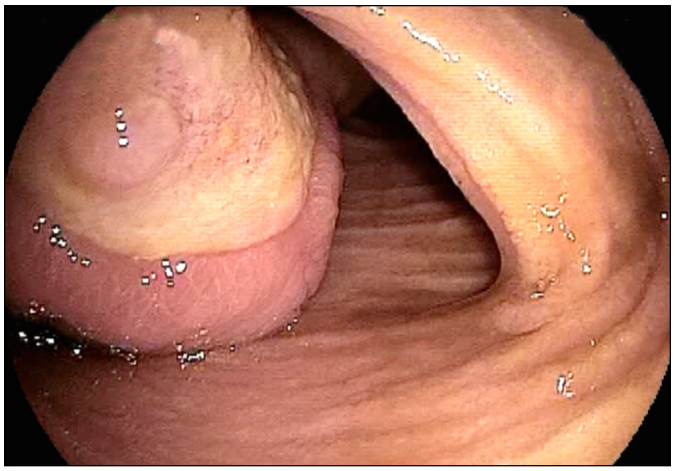

Figure 1. Endoscopic view of an inverted diverticulum with large ulceration located at the distal ileum.

Video 1. Endoscopic view of an inverted diverticulum with large ulceration located at the distal ileum. Watch the video: http://s3.gi.org/media/links/16-0136Video.mp4.

A computed tomography enterography revealed a tubular lesion at the distal ileum without additional findings. We performed a rectal double-balloon enteroscopy (DBE) to reach this area. At the distal ileum, approximately 50 cm from the ileocecal valve, we found a polypoid lesion of 4–5 cm in length with a broad-based stalk. There was an area of ulceration (about 1 cm in diameter) at the tip of the lesion without active bleeding. A spot tattoo was injected 2 cm proximal and distal to the base of the polypoid lesion (Figure 1 and Video 1). The patient underwent subsequent segmental resection of this area through surgery. Histological analysis confirmed the diagnosis of gastric heterotopia with associated ulceration and intussusception (Figure 2). The patient experienced a full recovery and has remained stable, without further episodes of bleeding or abdominal pain at 12 months of follow-up.

Endoscopic resection of a Meckel's diverticulum has been reported previously. One case had a successful outcome after placement of hemoclips at the base of the resection site, and the other case was complicated by perforation.[1,2] There have been reports in the literature of inverted Meckel's diverticulum diagnosed with balloon-assisted enteroscopy, but only a minority of cases were associated with intussusception.[3-6] The diagnosis of an inverted Meckel's diverticulum can be challenging. High clinical suspicion along with appropriate imaging tests can give useful information. Direct endoscopic evaluation with balloon-assisted enteroscopy can be helpful in confirming the exact nature and location of the lesion.

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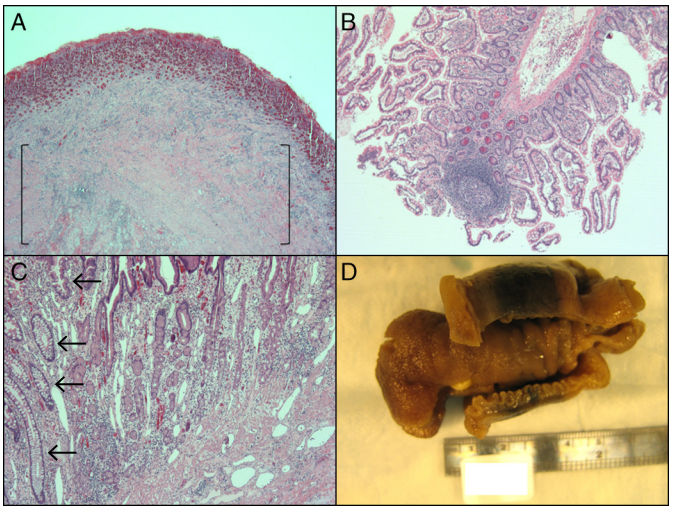

Figure 2. (A) Low-power view of the ulcerated tip with prominent reactive muscularis mucosa hypertrophy (brackets). (B) Normal ileal mucosa adjacent to pyloric metaplasia at the base of the intussusceptum. Notice the lymphoid follicle, frequent in ileal mucosa. Villous architecture is preserved. (C) Pyloric metaplasia is identified throughout the intussusceptum. This corresponds to gastric heterotopia. Notice the normal ileal mucosal crypts on the left (arrows). (D) Intussusception with intussuscipens cut open.

DISCLOSURES

Author contributions: S. Zepeda-Gómez wrote the manuscript and is the article guarantor. S. Al-Shankiti performed literature research. B. Halloran reviewed and edited the manuscript. D. D'Urbano performed histopathological analysis and reviewed the manuscript.

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