Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Title:
Intestinal obstruction by Meckel's diverticulum in stricturing Crohn's disease: coincidence?

Authors:
Teresa Ortiz Muñoz, Alberto García Picazo, Francisca Moreno Nisa, Pablo Puente López, Constantino Fondevila Campo

DOI: 10.17235/reed.2026.11874/2026
Link: PubMed (Epub ahead of print)

Please cite this article as:
Ortiz Muñoz Teresa, García Picazo Alberto, Moreno Nisa Francisca , Puente López Pablo, Fondevila Campo Constantino. Intestinal obstruction by Meckel's diverticulum in stricturing Crohn's disease: coincidence?. Rev Esp Enferm Dig 2026. doi: 10.17235/reed.2026.11874/2026.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Intestinal obstruction by Meckel's diverticulum in stricturing Crohn's disease: coincidence?

Teresa Ortiz Muñoz[1], Alberto García Picazo[1], Francisca García Moreno Nisa[1,2], Pablo Puente López[3], Constantino Fondevila Campo[1,4,5]

[1] General and Digestive Surgery Service, Hospital Universitario La Paz, IdiPAZ, Madrid, Spain.

[2] Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Madrid, Spain.

[3] Department of Pathology, Hospital Universitario La Paz, Madrid, Spain.

[4] Centro de Investigación Biomédica en Red en Enfermedades Hepáticas y Digestivas (CIBERehd), Madrid, Spain.

[5] Department of Surgery and Surgical Specializations, Autonomous University of Madrid (UAM), Madrid, Spain

Correspondence author: Alberto García-Picazo
General and Digestive Surgery Service
Hospital Universitario La Paz
Paseo de la Castellana 261
28046 Madrid, Spain
Email: alberto.gpicazo@gmail.com; agpicazo@salud.madrid.org.
ORCID: 0000-0002-3950-1959.

Keywords: Meckel diverticulum. Crohn disease. Intestinal obstruction.

Dear editor:

Meckel's diverticulum (MD) is the most common congenital gastrointestinal anomaly, with a prevalence of 0.6-4% in the general population and 5-8% in Crohn's disease (CD)[1]. While most cases remain asymptomatic, 4-7% may develop

complications, such as bleeding, inflammation, or bowel obstruction[1].

We report the case of a 56-year-old male with a long-standing history of stricturing CD involving distal ileum. He had previously been treated with multiple biologics agents (infliximab, adalimumab, ustekinumab) due to persistent stenotic disease requiring repeated endoscopic ileal dilations. He presented to the emergency department with a two-week history of generalized abdominal pain, nausea and vomiting. Physical examination revealed diffuse abdominal tenderness and distension without signs of peritonism. Laboratory tests were unremarkable. Abdominal radiography demonstrated dilated small bowel loops and CT scan suggested an incomplete ileal obstruction secondary to an intraluminal foreign body (Figure 1A).

Given his clinical stability, conservative management was initially implemented. After 72 hours, elective laparoscopy was performed. Intraoperatively, an inflamed MD was identified 50 cm from the ileocecal valve, containing an intraluminal stool-like body responsible for proximal obstruction (Figure 1B-C). The remainder of the small bowel revealed no CD strictures. Segmental ileal resection including the diverticulum was followed by side-to-side ileoileal anastomosis. The postoperative course was uneventful. Histopathological analysis revealed a true diverticulum with features of active Crohn's disease, without evidence of ectopic gastric mucosa or structuring changes (Figure 1D). The suspected foreign body was identified as an enterolith.

Symptomatic MD cases often differ from asymptomatic ones with respect to diverticular length, luminal diameter and the presence of stasis-promoting conditions. The presence of ectopic mucosa (gastric or pancreatic), is associated with bleeding rather than obstruction or enterolith formation[2]. MD may also mimic other abdominal conditions (appendicitis) and clinical manifestations vary depending on the underlying pathophysiology. These observations highlight the importance of careful clinical and radiological evaluation, especially when MD presents with atypical or obstructive features[2].

Enteroliths are an uncommon complication of MD and may appear on CT as hyperdense, calcified intraluminal content, requiring differentiation from ingested foreign bodies, like in our cases. They are generally understood to arise from chronic stasis within the diverticular lumen, which promotes progressive desiccation and

concretion of intestinal contents[3]. Traditionally, the presence of ectopic gastric mucosa has been proposed as a contributing factor, based on the hypothesis that acid secretion may alter luminal pH and facilitate precipitation of bile salts or calcium. However, this mechanism appears neither necessary nor sufficient for enterolith development. Contemporary reviews emphasize that the key driver of enterolithogenesis is luminal stasis, influenced by the intrinsic anatomy of the diverticulum, specifically its narrow neck[4,5].

The relationship between MD and CD introduces an additional layer of complexity. Several reports describe cases initially managed for presumed ileal CD based on symptoms such as abdominal pain and imaging findings including ileal wall thickening, strictures, or ulcerations[1,5]. However, biopsies did not reveal the typical features of inflammatory bowel disease, and the true diagnosis of MD was established only after surgical resection. In some instances, the diverticulum contained ectopic mucosa (such as gastric mucosa), providing a plausible explanation for the adjacent inflammation[1,5].

This clinical overlap underscores the importance of considering MD in the differential diagnosis. Additionally, inflammation related to MD, particularly in the presence of ectopic gastric mucosa, can mimic CD. Consequently, in patients with presumed “refractory” ileal CD, the possibility of an undiagnosed MD should be carefully considered[1-5].

This case emphasizes that MD should be considered in patients with atypical CD and histopathological evaluation is crucial to differentiate MD-related disease from active CD. In this case, the findings suggest a temporal coincidence rather than a direct causal relationship[2,5].

REFERENCES

1. Andreyev HJN, Owen RA, Thompson I, Forbes A. Association between Meckel's diverticulum and Crohn's disease: a retrospective review. Gut. 1994;35(10):1414-1416.

2. Moreno-Alfonso JC, Delgado-Miguel C, Hernández Martín S, Molina Caballero A, Pérez Martínez A, Yárnoz Irazábal MC. Clinical manifestations of Meckel's diverticulum and analytical distinction with appendicitis: a 20-year diagnostic study. Rev Esp Enferm Dig. 2025;117(1):1-8. doi:10.17235/reed.2025.11032/2024.
3. Eng NL, Kulaylat A, Jeganathan NA, Scow JS, Deutsch M. Meckel's Diverticulum Charading as Crohn's Disease: A Single-Institution Case Series. Cureus. 2023;15(4):e38191.
4. Hansen CC, Søreide K. Systematic review of epidemiology, presentation, and management of Meckel's diverticulum in the 21st century. Medicine (Baltimore). 2018;97(35):e12154. doi:10.1097/MD.0000000000012154.
5. Mason M, Neel NC, Matson J, Abbadessa B, Minns AB. Meckel's Diverticulum Enterolith Presenting as Small Bowel Obstruction. J Emerg Med. 2023;64(6):718-720. doi: 10.1016/j.jemermed.2023.03.048.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

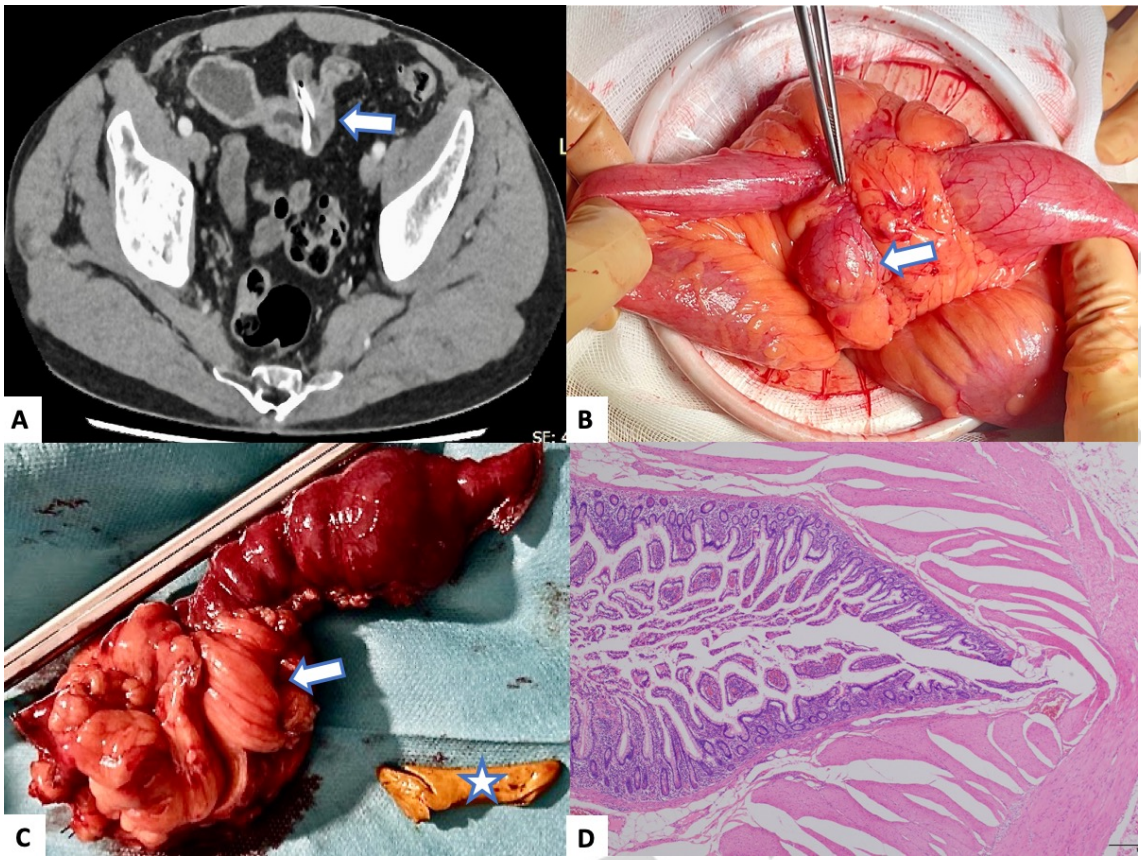

Figure 1. A: Abdominal CT with axial views showing a foreign body in the ileum with a suspected surrounding intestinal stricture (arrow). B. Intraoperative view of the Meckel's diverticulum. C: Surgical specimen: segmental ileal resection including the Meckel's diverticulum (arrow) and the foreign body (star) extracted from within the diverticulum. D: Section stained with hematoxylin and eosin, showing a small-intestine wall with an invagination of the mucosa and submucosa through the muscularis propria (which is defined as a diverticulum), the mucosa forming this diverticulum is small-intestinal mucosa. At higher magnification we can also appreciate the relationship of the invaginated mucosa and submucosa with the muscle layer.