

Title:

Intestinal tuberculosis as a diagnostic challenge in a high prevalence center

Authors:

Marta Fernández Carrasco, Alejandro Rodríguez Mateu, Olga Sánchez García

DOI: 10.17235/reed.2024.10822/2024 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Fernández Carrasco Marta, Rodríguez Mateu Alejandro, Sánchez García Olga . Intestinal tuberculosis as a diagnostic challenge in a high prevalence center. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10822/2024.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Revista Española de Enfermedades Digestivas The Spanish Journal of Gastroenterology

Intestinal tuberculosis as a diagnostic challenge in a high prevalence center

-Marta Fernández Carrasco. s. mfcarrasco16gmail.com

-Alejandro Rodríguez Mateu..

-Olga Sánchez García.

Department of Digestive Diseases. Hospital Universitario Torrecárdenas. Almería

Keywords: Intestinal tuberculosis. Crohn's disease. Necrotizing granulomas.

Dear Editor,

A 21-year-old man from Morocco, with no relevant medical history, presents with intermittent abdominal pain and diarrhea, without pathological contents, associated with low-grade fever and weight loss over a three-month period. Physical examination reveals a distended abdomen, painful in the hypogastric region, without signs of peritoneal irritation. Blood tests show leukocytosis with neutrophilia and increased acute-phase reactants, as well as anemia and malnutrition parameters. No microbiological agent is isolated from stool cultures.

An abdominal CT scan shows a 15 cm segment of terminal ileum with thickened walls up to 10 mm and trabeculation of the surrounding fat, leading to stenosis and retrograde dilation. Colonoscopy reveals no alterations in the colonic mucosa, and 10 centimeters of terminal ileum are explored, showing edematous, friable mucosa with superficial ulcerations and a fistulous opening (Figure 1).

Empirical treatment with antibiotics and corticosteroids is initiated. After a slow response, an urgent right hemicolectomy and resection of the terminal ileum with a colo-intestinal anastomosis is performed. Finally, histological analysis of the surgical specimen shows abundant abscess-forming epithelioid granulomas with focal necrosis (Figure 2). Antituberculosis treatment is started, with good patient recovery in the following months.

DISCUSSION



Intestinal tuberculosis (ITB) is a rare extrapulmonary manifestation of tuberculosis, more common in endemic areas and in immunocompromised patients. Most cases do not present active pulmonary symptoms at the time of diagnosis (1).

Imaging and endoscopic studies may be indistinguishable between ITB and Crohn's disease (2,3). The histological characteristics of tuberculosis show granulomas which, unlike those seen in Crohn's disease, are characterized by caseating necrosis (2).

Molecular studies, such as reverse transcription polymerase chain reaction (RT-PCR), and microbiological tests for mycobacteria are essential when histology is not diagnostic (4).

Systemic corticosteroids are indicated in patients with Crohn's disease, and there are a few cases of ileal disease refractory to corticosteroids. Furthermore, emergence of fast-acting biological therapies such as anti-TNF agents is typically recommended in corticosteroid-refractory cases with severe progression, which could have led to a devastating outcome for our patient (5).

This case highlights the importance of proper screening for latent infections in patients suspected of having inflammatory bowel disease (IBD) before starting immunosuppressive treatment as it could result in a fatal outcome (4).

BIBLIOGRAFÍA:

- 1. García-Morales N, García-Campos M, Cordón G, Iborra M. Tuberculosis intestinal, simulador de la enfermedad de Crohn: diagnóstico diferencial. Gastroenterol Hepatol. 2019;42(1):29–32.
- 2. Wei J-P, Wu X-Y, Gao S-Y, Chen Q-Y, Liu T, Liu G. Misdiagnosis and mistherapy of crohn's disease as intestinal tuberculosis: Case report and literature review. Medicine. 2016;95(1).
- 3. Lee Y, Yang S-K, Byeon J-S, Myung S-J, Chang H-S, Hong S-S, et al. Analysis of colonoscopic findings in the differential diagnosis between intestinal tuberculosis and *Crohn's disease*. *Endoscopy*. 2006;38(6):592–7.
- 4. Sequeira C, Coelho M, Mangualde J, Oliveira AP. Tuberculosis intestinal y perianal: una presentación clínica poco común y un diagnóstico desafiante. Rev Esp Enferm Dig. 2023;115:387-388.



5. Quera R, Núñez P, Sicilia B, Flores L, Gomollón F. Corticoides en la enfermedad inflamatoria intestinal: ¿siguen siendo una opción terapéutica? Gastroenterol Hepatol. 2023;46(9):716–26.

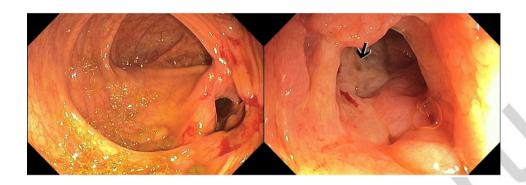


Figure 1: Colonoscopy image. On the left, normal mucosa in the cecum with a deformed and incompetent ileocecal valve. On the right, edematous mucosa of the ileum, with ulcers and a fistulous opening indicated by an arrow.

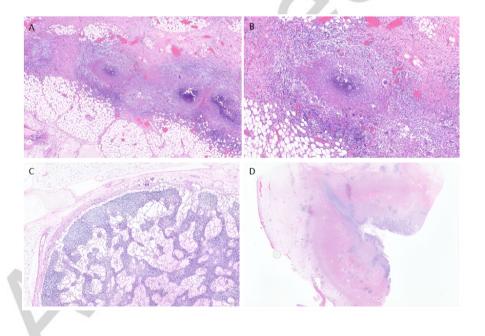


Figure 2: Optical microscope image

A) Abscess-forming and focally necrotizing granulomas in the omentum.



- B) Abscess-forming granulomas in the omentum.
- C) Locoregional lymph node with marked reactive changes.

Section of the ileum with chronic ulcerative inflammation and fistulization.

