

A Rare Case of Tuberculous Recto Colitis Mimicking Inflammatory Bowel Disease, Case Report

H. Tadili^{1*}, F. Amenzouy¹, Y. Bouktib¹, A. EL Hajjami¹, B. Boutakioute¹, M. Ouali Idrissi¹, N. El El Idrissi Ganouni¹

¹Department of Radiology, Arrazi Hospital, University Hospital center Mohamed VI, Marrakech Morocco

DOI: <https://doi.org/10.36347/sjmcr.2025.v13i10.083> | Received: 15.08.2025 | Accepted: 23.10.2025 | Published: 25.10.2025

*Corresponding author: H. Tadili

Department of Radiology, Arrazi Hospital, University Hospital center Mohamed VI, Marrakech Morocco

Abstract

Case Report

Gastrointestinal tuberculosis is a rare form of extrapulmonary tuberculosis, and involvement of the rectum and colon (recto colitis tuberculosis) is particularly uncommon. Its imaging features often overlap with inflammatory bowel disease, colorectal malignancy, or nonspecific infectious colitis, making radiologic evaluation crucial for early diagnosis. We report the case of a 36-year-old male who presented with a 3-month history of chronic diarrhea, intermittent rectal bleeding, tenesmus, and lower abdominal pain. Laboratory tests revealed mild anemia and elevated inflammatory markers. Computed tomography (CT) of the abdomen demonstrated regular thickening of the rectosigmoid wall with mucosal enhancement and surrounding fat stranding. No evidence of distant spread or lymphadenopathy was observed. Colonoscopy revealed multiple ulcerative and nodular lesions, and biopsies confirmed granulomatous inflammation with caseating necrosis. Ziehl-Neelsen staining was positive for acid-fast bacilli. The patient was treated with a standard 6-month anti-tubercular therapy regimen, resulting in complete clinical and radiologic resolution of the lesions. Recto colitis tuberculosis, though rare, should be considered in the differential diagnosis of chronic colitis with regular colonic wall thickening on imaging, especially in regions with high tuberculosis prevalence. Radiologic evaluation, combined with endoscopic and histopathologic correlation, is essential for timely diagnosis and management, allowing prompt initiation of anti-tubercular therapy and preventing complications.

Keywords: Rectocolitis Tuberculosis, Gastrointestinal Tuberculosis, Computed Tomography, Chronic Colitis, Granulomatous Colitis, Anti-Tubercular Therapy.

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INTRODUCTION

Gastrointestinal tuberculosis is a rare form of extrapulmonary TB, with colonic and rectal involvement (rectocolitis tuberculosis) being particularly uncommon. Clinical symptoms are often nonspecific, including chronic diarrhea, rectal bleeding, abdominal pain, and tenesmus, which can mimic inflammatory bowel disease or colorectal malignancy.

Radiologic evaluation is essential for early recognition, with CT and MRI potentially showing focal colonic wall thickening, mucosal enhancement, nodularity, and peri colonic fat stranding. Accurate diagnosis relies on correlating imaging findings with endoscopic and histopathologic evidence, enabling timely initiation of anti-tubercular therapy and reducing the risk of complications.

This report describes a rare case of recto colitis tuberculosis, highlighting its imaging features, clinical presentation, and management.

CASE REPORT

A 27-year-old male presented with a 3-month history of chronic diarrhea, intermittent rectal bleeding, tenesmus, and lower abdominal pain. There was no significant past medical history, no history of pulmonary tuberculosis, and no systemic symptoms such as fever or weight loss.

Imaging Findings

Contrast-enhanced computed tomography (CT) of the abdomen revealed regular thickening of the rectosigmoid wall with heterogeneous mucosal enhancement and mild peri colonic fat stranding. No enlarged mesenteric lymph nodes or distant organ involvement were noted.

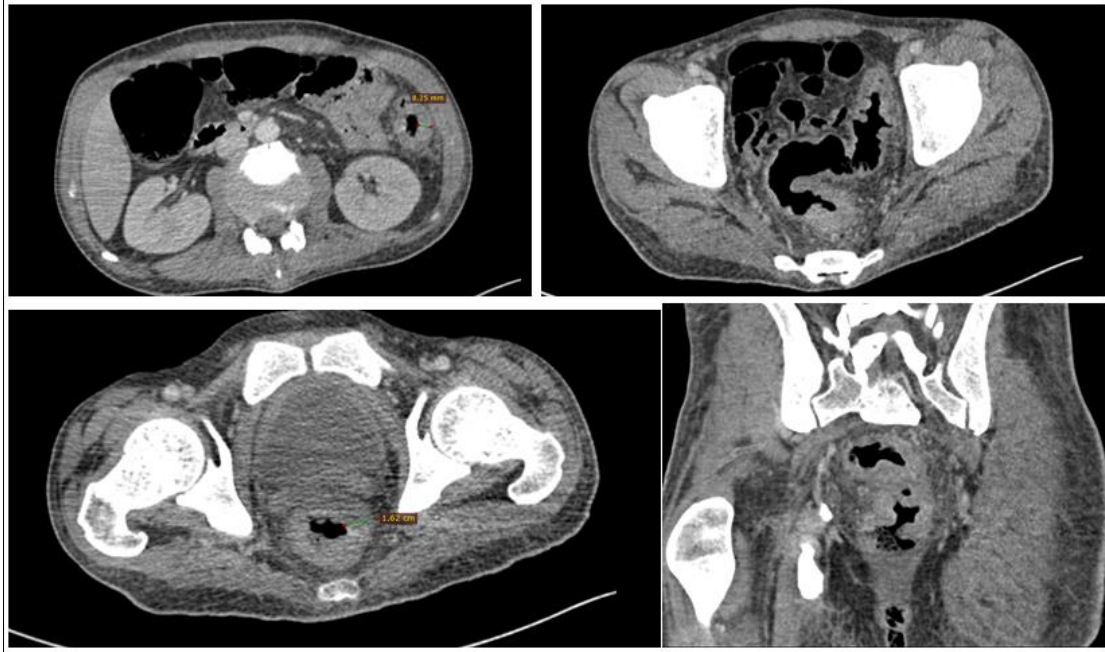


Fig. 1: “Images in axial and coronal view MPR showing circumferential and regular thickening of the left colon extending to the rectosigmoid junction, associated with hyperemia of the adjacent mesenteric fat.”

Endoscopic and Histopathologic Findings:

Colonoscopy demonstrated multiple ulcerative and nodular lesions in the rectum and sigmoid colon. Biopsies revealed granulomatous inflammation with caseating necrosis. Ziehl-Neelsen staining was positive for acid-fast bacilli, confirming *Mycobacterium tuberculosis* infection.

Management and Outcome:

The patient was started on a standard 6-month anti-tubercular therapy regimen (isoniazid, rifampicin, pyrazinamide, and ethambutol). Symptoms improved within the first 4–6 weeks of therapy. Follow-up colonoscopy at 3 months showed marked regression of ulcerative lesions.

DISCUSSION

Recto colitis tuberculosis is an uncommon presentation of gastrointestinal tuberculosis, accounting for less than 5% of all cases of abdominal TB. It most frequently affects the ileocecal region, with isolated rectosigmoid involvement being rare. The disease results from hematogenous spread, ingestion of infected sputum, direct extension from adjacent organs, or lymphatic dissemination.

Clinically, recto colitis tuberculosis presents nonspecific symptoms such as chronic diarrhea, abdominal pain, rectal bleeding, or altered bowel habits. These manifestations often overlap with those of inflammatory bowel disease, particularly ulcerative colitis and Crohn’s disease, or even colorectal carcinoma, making diagnosis challenging.

From a radiologic perspective, imaging plays a key role in early suspicion and differential diagnosis. On CT and MRI, typical findings include regular or irregular circumferential thickening of the colonic wall, mucosal or submucosal enhancement, and variable peri colonic fat infiltration. The presence of necrotic lymph nodes, ascites, or concomitant ileocecal involvement can support a tuberculous etiology. In the present case, imaging revealed a regular rectosigmoid wall thickening with mild surrounding inflammation and no significant lymphadenopathy, findings that, although nonspecific, were compatible with an inflammatory or infectious process.

Histopathological confirmation remains the gold standard for diagnosis, with the demonstration of caseating granulomas and acid-fast bacilli on Ziehl-Neelsen staining. In our case, these features were present, confirming *Mycobacterium tuberculosis* infection.

The standard treatment for gastrointestinal tuberculosis consists of anti-tubercular therapy (ATT) combining isoniazid, rifampicin, pyrazinamide, and ethambutol for six months. Early initiation of treatment typically leads to excellent outcomes and avoids complications such as strictures, perforations, or fistula formation.

For radiologists, recognizing the imaging patterns of recto colitis tuberculosis is essential to avoid misdiagnosis and unnecessary surgical interventions. The integration of clinical, endoscopic, histologic, and radiologic findings ensures accurate and timely management.

CONCLUSION

Rectocolitis tuberculosis is a rare form of gastrointestinal tuberculosis that can closely mimic inflammatory bowel disease or colorectal malignancy, both clinically and radiologically. The presence of a regular and circumferential colonic wall thickening, particularly when associated with hyperemia of the adjacent mesenteric fat, should raise suspicion for an infectious or granulomatous process, especially in endemic regions.

Radiologic evaluation plays a pivotal role in early detection and assessment of disease extent, while histopathologic confirmation remains essential for diagnosis. Prompt recognition and initiation of anti-tubercular therapy lead to excellent clinical and radiologic outcomes. Increased awareness among radiologists and clinicians is crucial to prevent diagnostic delays and avoid unnecessary invasive procedures.

REFERENCES

- Debi U, Ravisankar V, Prasad KK, Sinha SK, Sharma AK. Abdominal tuberculosis of the gastrointestinal tract: revisited. *World J Gastroenterol*. 2014;20(40):14831–14840.
- Epstein BM, Schneider JW. Imaging of tuberculosis of the abdomen and pelvis. *Clin Radiol*. 1998;53(8):511–520.
- Geng P, Zhao J, Wang G, *et al.*, Differentiation between Crohn's disease and intestinal tuberculosis based on CT enterography findings. *Abdom Radiol (NY)*. 2018;43(10):2545–2554.
- Horvath KD, Whelan RL. Intestinal tuberculosis: return of an old disease. *Am J Gastroenterol*. 1998;93(5):692–696.
- Lin WC, Chen MJ, Chang CW, *et al.*, Computed tomography findings of intestinal tuberculosis: comparison with Crohn's disease. *Clin Radiol*. 2012;67(8):801–808.
- Puri AS, Vij JC, Chaudhary A, *et al.*, Diagnosis and management of colonic tuberculosis: report of 27 cases and review of the literature. *J Clin Gastroenterol*. 1996;22(1):11–15.
- Sharma MP, Bhatia V. Abdominal tuberculosis. *Indian J Med Res*. 2004;120(4):305–315.
- Sharma R, Madhusudhan KS, Ahuja V. Intestinal tuberculosis: the great mimicker. *Intest Res*. 2017;15(3):372–381.
- WHO. Global Tuberculosis Report 2024. Geneva: World Health Organization; 2024.