



CASE REPORT

Tuberculosis Beyond the Lungs: A Rare Case of Rectal Stricture

Sivaraj S.M¹, Rahul S.M¹

Received Date:
14 - June - 2026
Revised Date:
06 - June - 2026
Accepted Date:
08 - July - 2026
Published Date:
10 - July - 2026

Department of Surgical Gastroenterology, Billroth Hospitals, Chennai, Tamilnadu, India, ORCID: <https://orcid.org/0009-0008-5974-2291>

Abstract

Tuberculosis of the colon can involve any part of the colon whereas the involvement of the rectum is rarely reported even from areas where gastrointestinal tuberculosis is prevalent [1,2]. It is a rare manifestation of extra pulmonary tuberculosis which typically occurs as a result of the spread of TB from adjacent organs or through hematogenous dissemination. Here we report a 38-year-old male from India presented with complaints of severe lower abdominal pain, bleeding per rectum, dysuria for 3 days, was diagnosed as tuberculosis rectal stricture.

Keywords: Rectal Stricture, Fistula, Hemorrhoids, GI Tuberculosis.

Corresponding Author:

Rahul S.M, Department of Surgical Gastroenterology, Billroth Hospitals, Chennai, Tamilnadu, India.

Citation:

Sivaraj S.M, Rahul S.M (2026) Tuberculosis Beyond the Lungs: A Rare Case of Rectal Stricture. *World J Case Rep Clin Imag.* 2026 July; 5(1), 1-5.

Copyrights

© Rahul S.M, et al., 2026, This article is licensed under the Creative Commons Attribution-Non Commercial-4.0-International-License-(CCBY-NC) (<https://worldjournalofcasereports.org/blogpage/copyright-policy>). Usage and distribution for commercial purposes require written permission.

1. Introduction:

A stricture refers to a narrowing or constriction of a passage that can occur in any part of the body often caused by scar tissue, inflammation or malignancy. Inflammatory Bowel Disease which includes group of chronic inflammatory conditions such as Crohn's disease and Ulcerative colitis, is a common entity among western countries where as tuberculous (TB) etiology is common in India. Although TB primarily affects the lungs, it can also affect other organs such as brain, spine, kidneys, lymph nodes, intestines, and bones. The prevalence of pulmonary tuberculosis was 295.5 per 100,000 population with higher prevalence amongst

males in the year 2020 and the number of tuberculosis patients fell marginally to 2.23 million in the year 2023. According to The Global TB Report 2020, Extrapulmonary tuberculosis (EPTB) constituted 16% of the 7.5 million reported TB cases globally and 19% in South-East Asia. Although Gastrointestinal (GI) tuberculosis is the sixth most common site for extrapulmonary tuberculosis, GI TB accounts for only 1% of total extra pulmonary TB rectal involvement is very rare even in highly endemic regions like India [1,4]. The Index patient presented with severe lower abdominal pain, Dysuria, Pain during defecation, bleeding per rectum with fever for 3 days, was diagnosed as tuberculosis rectal stricture and the patient was started on ATT medications [3,5].

2. Case Report:

A 38-year-old patient presented with the complaints of severe lower abdominal pain, Dysuria, anal region pain during defecation, rectal bleeding for 3 weeks, fever for 3 days. Rectal examination revealed tight stricture extending 5cm from the anal verge (Figure 4). Sigmoidoscopy performed revealed hemorrhoids at the anal verge (Figures 1 & 2). Followed by which MRI fistulogram was performed which revealed a 6.9cm long perianal fistulous tract extending from the left perianal skin along the gluteal cleft about 1.5cm below and just anterior to the anal verge coursing posterosuperiorly in the left ischioanal fossa upto the left levator ani (mainly involving the puborectalis muscle) ending blindly (Figure 3). A 1.2cm transphincteric extension into the intersphincteric plane from this tract at 5' o clock position about 8mm below the left levator ani and internal opening into the anorectal junction at 6'o clock position about 4 cm proximal to the anal verge, Obliteration of the lumen of the anal canal with dilated rectum (Figure 5). The patient was examined under anesthesia and biopsy was taken which revealed rare aggregates of epithelioid histocytes admixed with giant cells, Hypertrophic anal papillae with scattered non-

necrotizing granulomas suggestive of tuberculosis. The standard anti-TB regimen was started. The patient's condition symptomatically improved after the initiation of treatment and remained asymptomatic on further follow-up.



1.



2.

Figures 1 & 2: Sigmoidoscopy of the index patient depicting hemorrhoids secondary to the rectal stricture.

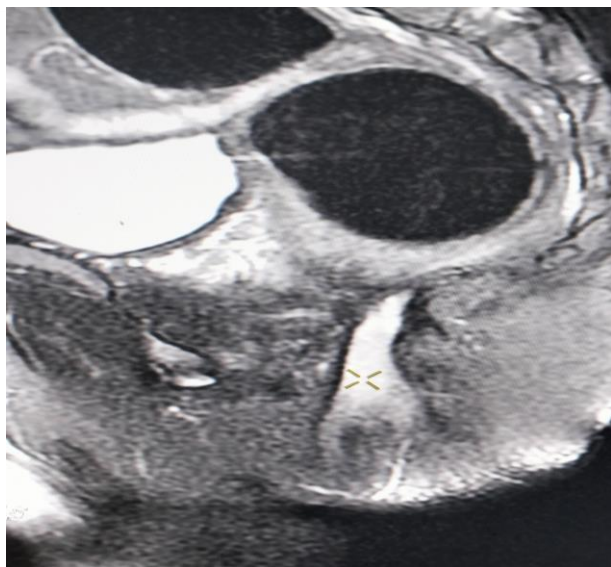


Figure 3: Sagittal T2W FSE with fat sat MRI view of the index patient showing 6.9cm long hyperintense perianal fistulous tract with maximum thickness of about 4.5mm extending from the left perianal skin along the gluteal cleft about just 1.5cm and just anterior to the anal verge.



Figure 4: Coronal T2W FSE with and without fat sat MRI view of the index patient showing obliteration of the lumen of the anal canal with dilated rectum depicting the stricture



Figure 5: Axial T1W FSE, T2W FSE with and without fat sat view MRI of the index patient showing the internal opening into the anorectal junction at 6'o clock position about 4cm proximal to the anal verge.

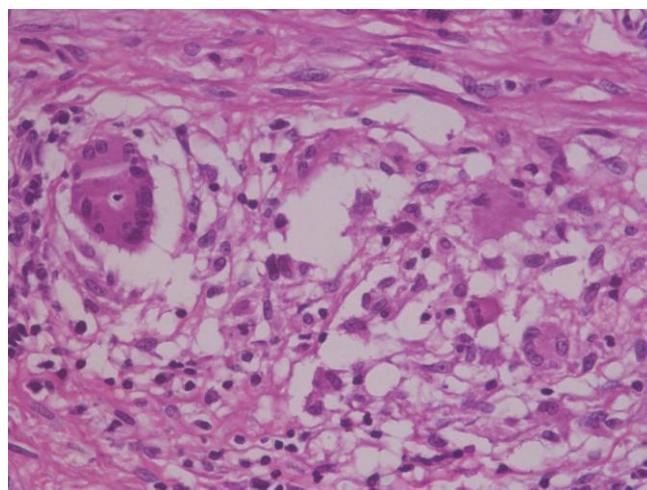


Figure 6: Anal polyps sent to histopathology: H&E staining of the biopsy specimen showing Langhans giant cell suggestive of tuberculosis.

3. Discussion:

Rectal involvement in Gastro-intestinal tuberculosis is very rare entity. Symptoms include difficulty passing stool, rectal bleeding and abdominal pain. Treatment typically involves anti-tuberculosis medications. Treatment durations can vary but usually lasts for several months to ensure complete eradication of

the infection and sometimes surgery in severe cases where there is significant narrowing of the rectal lumen causing obstruction or other complications and to alleviate sepsis if any. Surgical options may include stricture-plasty, Resection and anastomosis, Colostomy in rare cases where the stricture is irreparable or associated with severe complications. Complications include bowel obstruction, Fecal impaction, Fistula formation, Perforation, Weight loss, Increased risk of secondary infections, Hemorrhoids. Although tuberculosis rectal stricture itself doesn't cause hemorrhoids, the chronic inflammation combined with difficulty passing stools can contribute to the development or worsening of hemorrhoids. Close monitoring of the patient's response to treatment is essential, including clinical evaluation, imaging studies and laboratory tests to assess treatment efficacy and detect complications or recurrence of the infection. Failure to recognize this condition may lead to extensive surgical intervention based on a presumed malignant diagnosis, resulting in significant morbidity. Therefore, establishing an accurate diagnosis is crucial.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Acknowledgments: Special thanks to my mentors Dr. Sivaraj S M and Dr. Sankar Narayanan M L, senior consultants, Department of surgical gastroenterology, Chennai, Tamilnadu, India.

Conflicts of Interest: The authors declare no conflict of interest.

4. References

1. Pandit K, Khanal S, Bhatta S, Trotter AB. Anorectal tuberculosis as a chronic rectal mass mimicking rectal prolapse in a child-a case report. *Ann Med Surg (Lond)*. 2018 Sep 12;36:264-266. doi: 10.1016/j.amsu.2018.07.012. PMID: 30568795; PMCID: PMC6287574.
2. Das PC, Radhakrishna K, Rao PL. Rectal stricture: a complication of tuberculosis. *J Pediatr Surg*. 1996 Jul;31(7):983-4. doi: 10.1016/s0022-3468(96)90429-7. PMID: 8811575..
3. Sathiyamoorthy R, Kalaivani M, Aggarwal P, Gupta SK. Prevalence of pulmonary tuberculosis in India: A systematic review and meta-analysis. *Lung India*. 2020 Jan-Feb;37(1):45-52. doi: 10.4103/lungindia.lungindia_181_19. PMID: 31898620; PMCID: PMC6961104.
4. Manoria P, Singhai A, Gulwani HV. Isolated Rectal Tuberculosis in Immunocompetent Host. *J Glob Infect Dis*. 2021 Aug 3;13(3):148-150. doi: 10.4103/jgid.jgid_318_20. PMID: 34703157; PMCID: PMC8491808.
5. Rectal stricture due to tuberculosis. C.K. Chung, W.C.S. Meng, T.M.M.Thomas, M.C.M.Chan, Y.Lau and A.W.C. Yu (*Australian and New Zealand Journal of Surgery*).

**Submit your manuscript to the**

World Journal of Case Reports and Clinical Images
(ISSN: 2835-1568; CODEN: USA)

and benefit from:

- + Convenient online submission
- + Rigorous peer review
- + Immediate publication on acceptance
- + Open access: articles freely available online
- + High visibility within the field
- + Retaining the copyright to your article

Submit your manuscript at

<https://worldjournalofcasereports.org/>

&

wjcasereports@gmail.com;

submission@worldjournalofcasereports.org