

A Case of *Mycobacterium bovis* Infection Causing Necrotizing Granulomas of the Gastrointestinal Tract and Retroperitoneal Lymphadenopathy





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Introduction

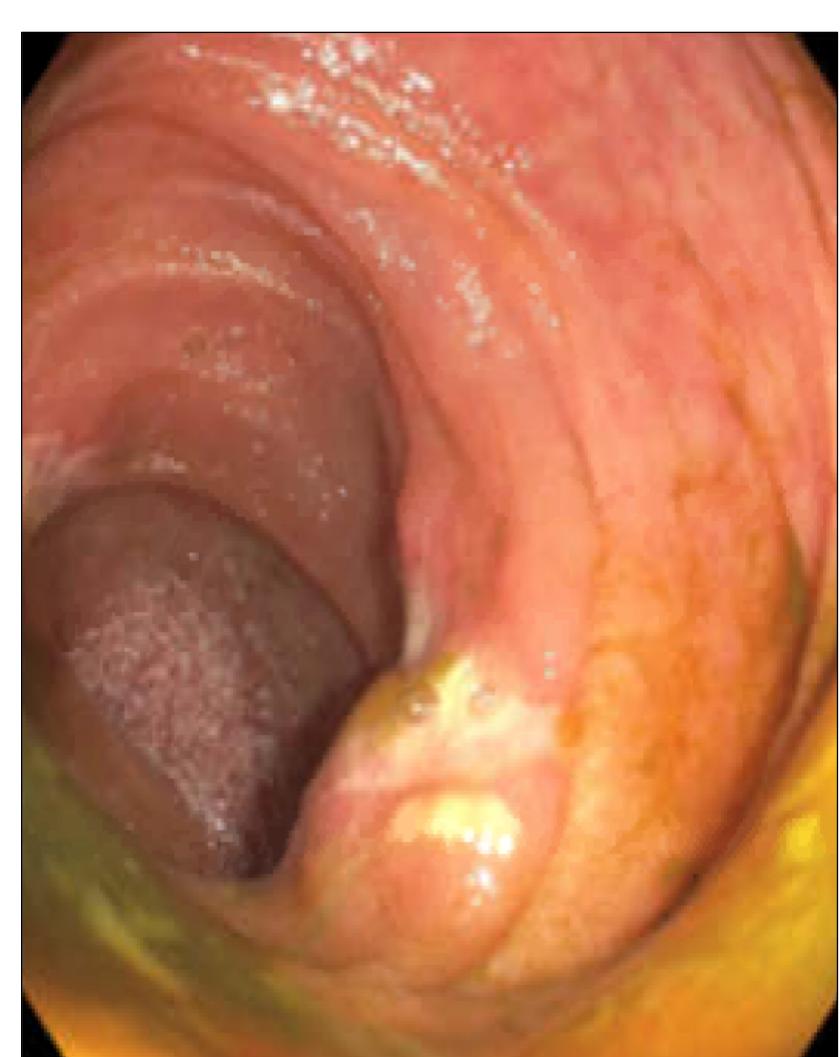
Mycobacterium paratuberculosis have been found in tissue samples in patients with terminal ileitis. *Mycobacterium bovis*, which is endemic in dairy and meat cows within Mexico, can present with extrapulmonary findings. However, the GI tract is an especially rare site for this organism. Our study describes a case of *Mycobacterium bovis* infection with intestinal involvement.

Case Description

44-year-old female with a history of ankylosing spondylitis treated with adalimumab and travel to Mexico endorsed 5 weeks of worsening epigastric pain, unintentional weight loss, diarrhea, and arthralgias during an outpatient visit

- Review of CT scans 3 and 10 years prior described prominent retroperitoneal lymph nodes
- She was referred to interventional radiology for lymph node biopsy which revealed necrotizing granulomatous lymphadenitis
- After these results, she was admitted to the hospital and CT demonstrated mural thickening and inflammatory stranding of the terminal ileum
- EGD appeared normal. Colonoscopy displayed an edematous ileocecal valve and terminal ileum with ulcers as well as erosions of the cecum and proximal ascending colon

- Biopsy of the ileum demonstrated necrotizing granulomatous inflammation and biopsy of the colon was consistent with focal poorly formed granulomatous inflammation.
- Mycobacterium PCR and Ziehl-Neelsen stain (Figure 1 Right) of the duodenal biopsy were positive for acid-fast bacilli.
- The species was later determined to be *Mycobacterium bovis*.
- The patient improved with RIPE therapy and was later transitioned to rifampin, isoniazid, and pyridoxine



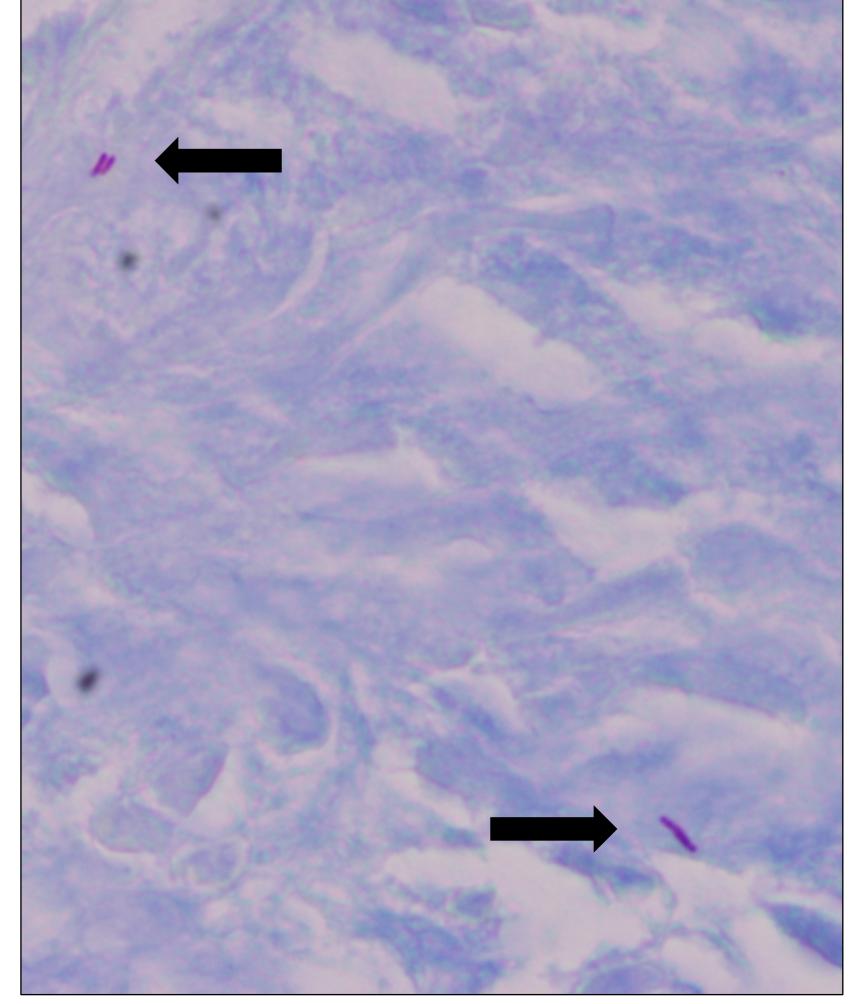


Figure 1: (Left) Ulcer of terminal ileum present on colonoscopy; (Right) Ziehl-Neelsen stain highlighting acid scattered acid-fast bacilli in the necrotic tissue, 1000x.

Discussion

- Granulomatous ileitis or other intestinal manifestations of *Mycobacterium* spp. are rare.
- This case of *Mycobacterium bovis* infection represents an unusual etiology for intestinal inflammation and erosions in a patient previously on immunosuppression
- This case highlights the importance of including mycobacterial diseases within the differential for gastrointestinal tract lesions.

References

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