

# Enterocolitis caused by *Mycobacterium avium* complex in an HIV-infected patient

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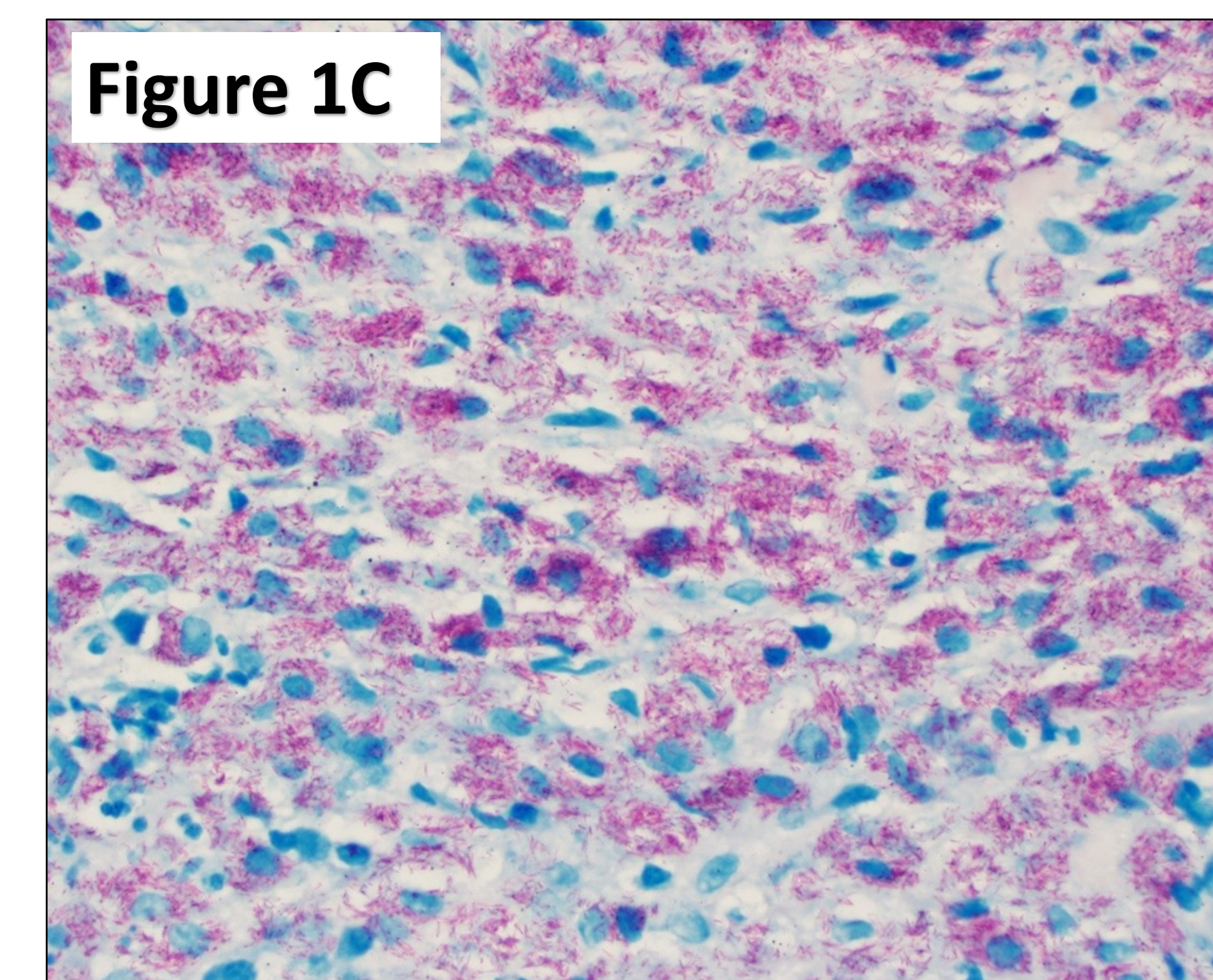
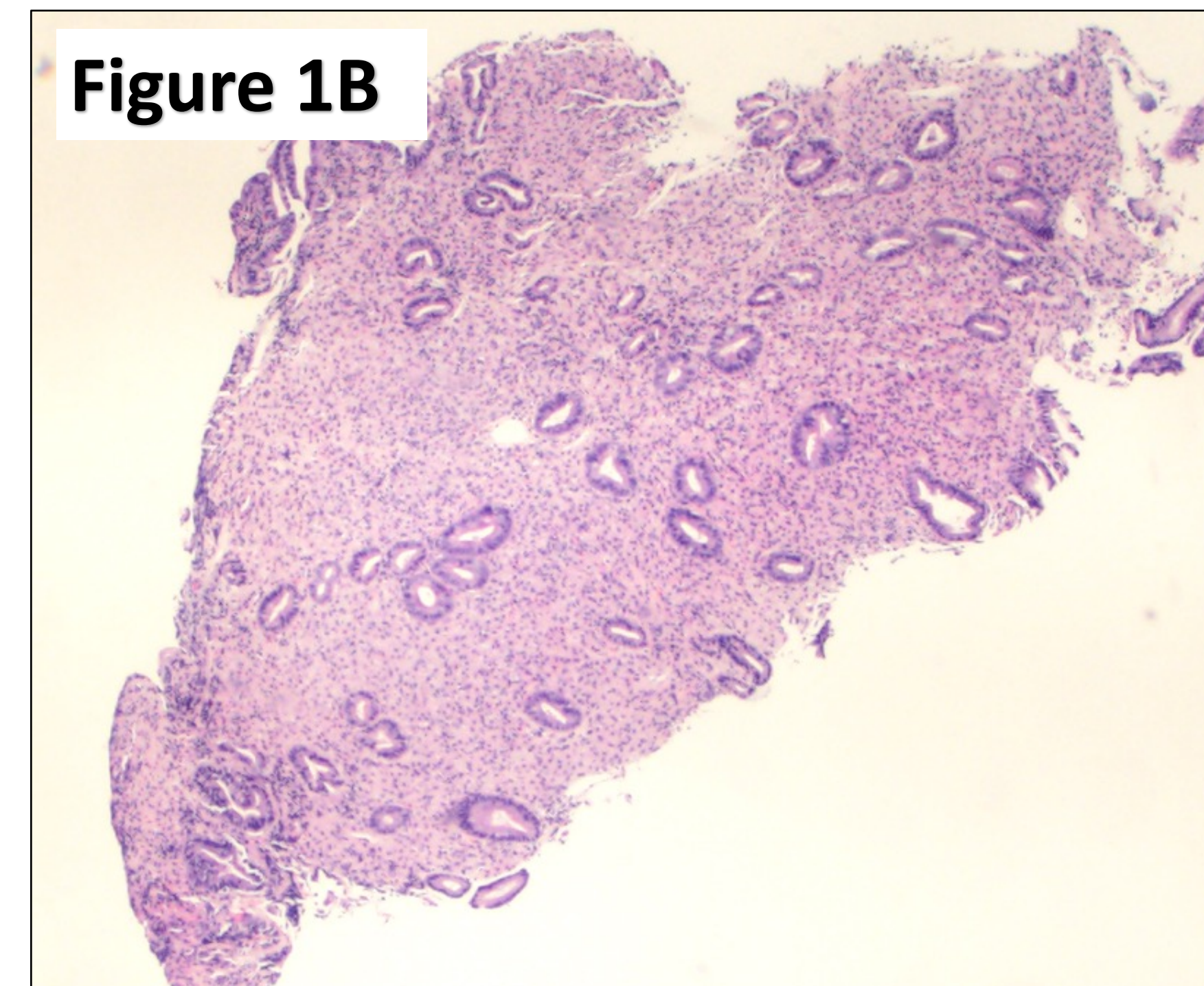
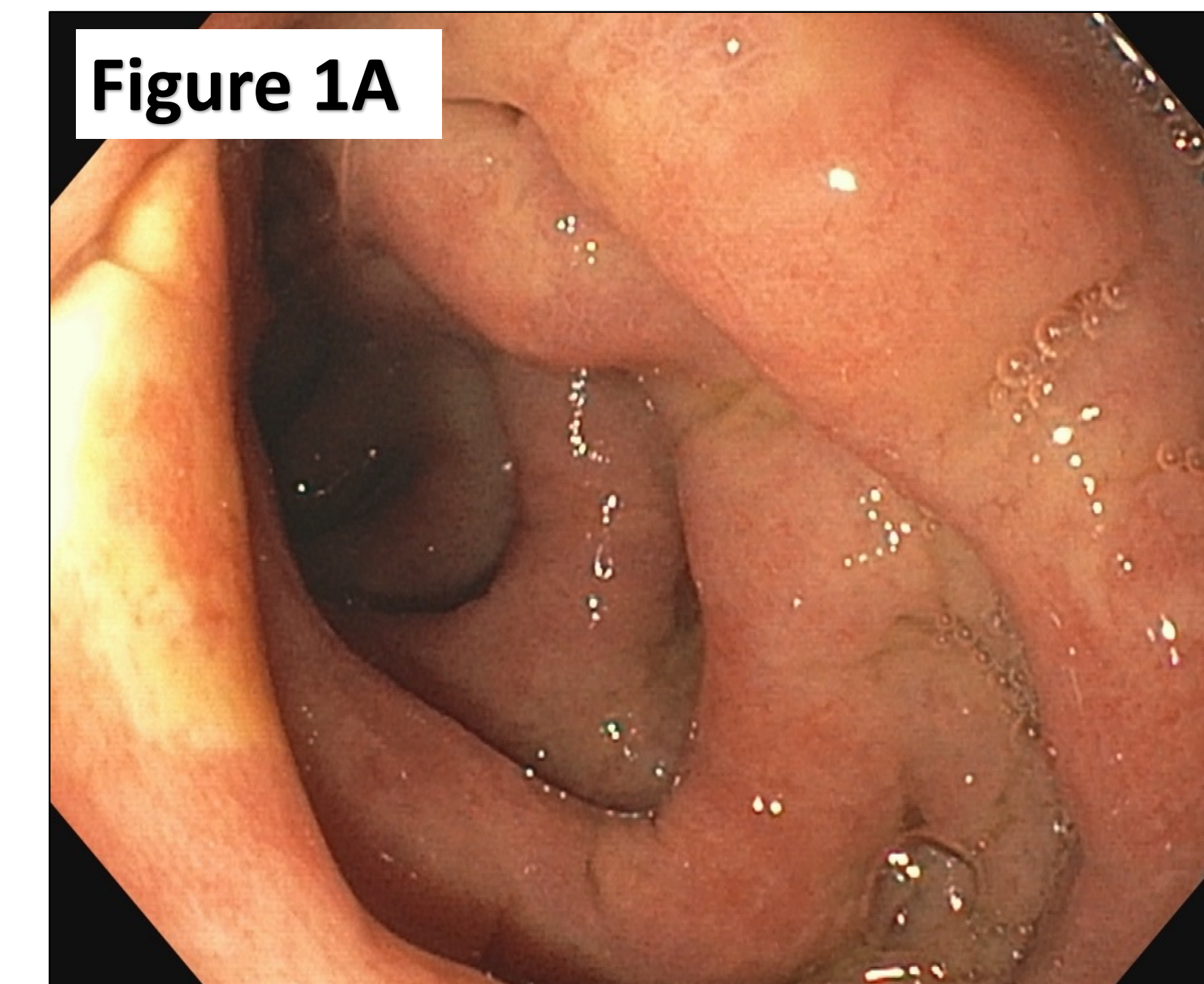
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## Introduction

- *Mycobacterium avium* complex (MAC) infection is an opportunistic infection seen in patients with advanced HIV (CD4 lymphocyte counts <50 cells/uL).
- Portals of entry for MAC are the respiratory and gastrointestinal tracts.<sup>1</sup>
- Presence of gastrointestinal tract involvement by MAC is associated with disseminated infection.
- Symptoms of disseminated MAC may include fever, weight loss, abdominal pain, and diarrhea.
- With increased use of antiretroviral therapy, disseminated MAC has become uncommon.
- Here we report a rare case of chronic diarrhea caused by *Mycobacterium avium* complex (MAC) infection involving the duodenum, colon, and rectum of a patient with advanced HIV.

## Case Description

- A 41-year-old man with HIV infection presented with eight months of frequent, watery diarrhea associated with malaise, nausea, bloating, abdominal pain, and weight loss.
- His last CD4 count was 50 cells/uL and his HIV viral load was undetectable while on dolutegravir/lamivudine.
- **EGD showed diffuse erythema and edema affecting the mucosa of the entire duodenum with associated villous blunting and fissuring (Figure 1A).** Flexible sigmoidoscopy revealed normal appearing mucosa to the level of the ascending colon.
- **Pathology from duodenal biopsies showed extensive histiocytic inflammation with presence of acid-fast bacillus organisms (Figures 1B, 1C).** Random biopsies from the colon and rectum showed similar findings.
- Acid-fast bacillus blood cultures grew *Mycobacterium avium-intracellulare*. He had history of MAC mycobacteria under treatment with ethambutol, azithromycin, and rifabutin. His MAC treatment was changed to amikacin, linezolid, rifampin, and ethambutol with subsequent improvement in his diarrhea.



## Discussion

- Disseminated MAC is associated with gastrointestinal tract involvement:
  - It most often affects the duodenum, followed by the rectum.
  - Endoscopy may show nodular, erythematous, or edematous lesions.<sup>2</sup>
  - Biopsies will show sheets of macrophages laden with acid-fast bacilli.<sup>3</sup>
- **MAC enterocolitis remains an important etiology of chronic diarrhea in patients with advanced HIV.**

## References

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3. AbdullGaffar B, Bashir M. Patterns of *Mycobacterium avium-intracellulare* complex infection in duodenal endoscopic biopsies in HIV/AIDS patients. *Ann Diagn Pathol* 2020;49:151638.