



School of Medicine

Atypical Disseminated Mycobacterium avium Complex: A Rare Case of Chronic Severe Diarrhea in a Patient with HIV

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INTRODUCTION

- The global use of highly active antiretroviral therapy (HAART) has led to a dramatic decline in the incidence of disseminated Mycobacterium Avium Complex (MAC) to ≤ 2 cases per 1000 person-years.
- We present a unique case of chronic diarrhea secondary to disseminated MAC which was initially thought to be cytomegalovirus(CMV) viremia.

CASE DESCRIPTION

- A 41-year-old man with Human Immunodeficiency Virus(HIV) presents with progressively worsening loose, non-greasy, non-bloody, non-mucoid diarrhea for 6 weeks.
- Associated with recent 10-pound unintentional weight loss, and dyspnea.
- Outside records report splenectomy for a splenic rupture with tissue culture positive for acid-fast bacilli(AFB) non-Mycobacterium tuberculosis, non-MAC by PCR 3 months prior, started on therapy but reports nonadherence.

Physical exam:

- Hypotensive, Tachycardic, Tachypneic.
- Cachectic.

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- **LABS:**
- Hb 6.9 gm/dl, MCV 79.5 FL, platelets of 138,000/microL, WBC normal.
- Pre-renal AKI with creatinine 1.36 mg/dl, lactic acid of 3.0mMol/L.
- Albumin of 2.1 gm/dl . Bilirubin, ALT, AST, and ALP were normal.
- Extensive lab workup showed low CD4 count of 7 cells/uL, and high CMV PCR at 4,068 IU/mL.
- Negative blood cultures, fungal culture, mycobacterial blood, and sputum cultures.
- Qualitative fecal fat positive.
- Negative stool testing for Clostridium difficile, fecal leukocyte antigen, cryptosporidium, Giardia antigen, Salmonella, Shigella, Campylobacter species, ova and parasites.
- **IMAGING:**
- CT abdomen/pelvis showed a loculated fluid collection in the splenic bed that was drained with negative cultures.
- Initial presumptive diagnosis of CMV viremia is not likely based on the workup, endoscopic workup was pursued.

ENDOSCOPY



A. Colonoscopy- Terminal Ileum

- **EGD:** Duodenum had petechial lesions
- **Colonoscopy:** The terminal ileum (TI) had petechial lesions which on pathologic examination revealed diffuse AFB and villous blunting in TI.
- Normal colonic biopsies. Biopsies were negative for CMV, celiac disease, and Whipple's disease.
- **Final diagnosis:** Disseminated MAC

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- Diagnosed with disseminated atypical MAC(most likely M. kansasii) in the setting of HIV-AIDS.
- CMV viremia was thought to be an incidental finding without GI manifestations.
- Treatment for disseminated MAC with ethambutol, isoniazid, rifampin, azithromycin, pyridoxine, and for HIV with Dolutegravir & Truvada started.
- However, the patient deteriorated despite treatment, and developed multi-organ failure.
- Goals of care discussion conducted, code status changed to DNR/DNI. Eventually died from multi-organ failure 16 days later.

DISCUSSION

- Diarrhea is a common gastrointestinal symptom in AID, and has many etiologies.
- DMAC is associated with higher morbidity and mortality. So physicians must be familiar with the causes and utilize endoscopic interventions as needed for effective diagnosis and treatment in AIDS patients.