



Case Report

Mycobacterium avium complex enteritis in HIV-infected patient

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ABSTRACT

Disseminated *Mycobacterium avium* complex (MAC) infection is an important AIDS-defining opportunistic infection. The introduction of antimicrobial prophylaxis and antiretroviral therapy (ART) markedly reduced the incidence of disseminated MAC infection and improved the survival of affected individuals. However, it seems that patients with new or recurrent MAC infection are still encountered in clinical practice. Our images captured the characteristic endoscopic findings of MAC duodenitis. The gastrointestinal (GI) tract appears to be a common port of entry for MAC infection in patients with AIDS. Early recognition of GI MAC infection by endoscopy in HIV-infected patients and initiation of anti-MAC therapy and ART may reduce morbidity and mortality.

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A 39-year-old man presented with 3-month history of cough and 1-month history of fever, diarrhea and shortness of breath. Neither social nor medical history was remarkable except past sexual intercourses with multiple male partners.

On clinical examination, he had no rales and abnormal findings in the abdomen. Laboratory examinations showed HIV-1-positive with CD4 count 12 cells/mm³. Chest X-ray on admission showed bilateral reticulonodular shadows and a cavity on the right upper lobe (Fig. 1). Sputum culture was positive for *Mycobacterium avium* complex (MAC) and *Mycobacterium kansasii* (*M. kansasii*). Upper gastrointestinal endoscopy revealed diffusely scattered whitish-yellowish nodules measuring 5–10 mm in size in the duodenum (Fig. 2), and MAC was also cultured from the biopsy specimens.

After 6-month of anti-mycobacterial therapy (isoniazid, rifampicin, ethambutol and clarithromycin), the symptoms had been resolved, and the improvement of the lung and duodenum lesions was noted.

Among HIV-infected individuals, disseminated MAC is usually seen in patients with a CD4 count of less than 50 cells/mm³ [1,2]. The risk of MAC bacteremia is approximately 60% within in 1 year for patients with MAC colonization in the gastrointestinal (GI) tract as compared with those without GI involvement [3]. The introduction of effective antiretroviral therapy (ART) for HIV infection and antimicrobial prophylaxis against MAC infection have had a major impact on the incidence and the clinical course of MAC infection in patients with AIDS, but patients with new or

recurrent MAC infection are still encountered in clinical practice. Because GI MAC infection may be the first presentation of AIDS associated opportunistic infection, it is essential to be alert for endoscopic findings, even in the era of effective ART. Early recognition of GI MAC infection by endoscopy in HIV-infected patients and initiation of anti-MAC therapy and ART may reduce morbidity and mortality.



Fig. 1. Chest radiograph in 39-year-old HIV-infected patient showing bilateral reticulonodular shadows and a cavity on the right upper lobe.

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Fig. 2. Upper gastrointestinal endoscopy revealed diffusely scattered whitish-yellowish nodules measuring 5–10 mm in size in the duodenum.

Authors' contributions

MI and JT treated the patient. MI wrote the report. MI took the photo. MI and JT reviewed and revised the report.

Conflict of interest statement

We declare that we have no conflict of interest.

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There's no funding sources related to this article.

Ethics committee approval

The ethics committee of National Center for Global Health and Medicine approved this article.

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