
Case Report

**RESPIRATORY AND ENTERAL TRANSEPIHELIAL INFECTIONS
OF *MYCOBACTERIUM AVIUM* COMPLEX IN A PATIENT
WITH ADVANCED HIV INFECTION**

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Abstract Pulmonary manifestation of *Mycobacterium avium* complex (MAC) disease is an unusual event in patients with advanced HIV infection. Here, we present a case of disseminated MAC disease in a 29-year-old acquired immune deficiency syndrome (AIDS) patient that had both pulmonary and enteral involvement. The mycobacteria isolated from the pulmonary and enteral lesions were genetically identical. Based on a dendrogram analysis with variable-number tandem-repeat typing, the isolate appears to cluster with *M. avium* subsp. *avium* and *M. avium* subsp. *paratuberculosis*. Biopsies of both the pulmonary lesion and the enteral lesion were conducted; the resulting histology showed infections of the epithelia, implicating both sites as being the source of the transepithelial infection. The patient was then treated with anti-mycobacterial therapy, and anti-retroviral therapy for the treatment of AIDS was introduced on the 13th day. The patient's general condition improved, so he was discharged on the 69th day. To our knowledge, this is the first case report of a MAC transepithelial infection through the airways in the lung of a patient with advanced human immunodeficiency virus infection. However, the information collected in the present study is insufficient to determine the mechanism by which the enteral lesion developed. Further study will be required to determine whether or not the specificity of the isolates is related with the mechanism of lesion development.

Key words: *Mycobacterium avium* complex, AIDS, Pulmonary involvement

A CASE OF PULMONARY TUBERCULOSIS WITH LEUKOPENIA
DURING THE TREATMENT, LEADING TO DIAGNOSIS
AS MYELOYDYSPLASTIC SYNDROME

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Abstract An 84-year-old man was admitted to our hospital because of smear positive pulmonary tuberculosis. On admission, hemogram revealed no abnormality. We started anti-tuberculous chemotherapy including isoniazid, rifampicin and ethambutol. Leukopenia appeared after five days of treatment. Drug-induced cytopenia was suspected and all the anti-tuberculous drugs were discontinued on day 52. However, white blood cell count did not recover and chemotherapy was resumed with ethambutol and levofloxacin. Because leukopenia lasted even after drug withdrawal, complication of blood disorders were suspected and further bone marrow examination led to a diagnosis of myelodysplastic syndrome. Drug-induced leukopenia is frequently observed during anti-tuberculous chemotherapy. However, when an elderly patient

develops leukopenia during treatment for tuberculosis, the possibility of blood disorders should be taken into account.

Key words: Tuberculosis, Leukopenia, Myelodysplastic syndrome

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