

Nontuberculous Mycobacterium Infection - Still An Important Disease Among People With Late HIV Diagnosis

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Abstract : Nontuberculous mycobacteria (NTM) are bacterial species that cause diversely manifesting diseases mainly in immunocompromised patients. In people with HIV, NTM infection is an AIDS-defining disease and usually appears when the lymphocyte T CD4 count is below 50 cells/ μ l. The usage of antiretroviral therapy has decreased the prevalence of NTM among people with HIV, but the disease can still be observed especially among patients with late HIV diagnosis. Common presence in environment, human colonization, clinical similarity with tuberculosis and slow growth on culture makes NTM especially hard to diagnose. The study aimed to analyze the epidemiology and clinical course of NTM among patients with HIV. This study included patients with NTM and HIV admitted to our department between 2017 and 2023. Medical records of patients were analyzed and data on age, sex, median time from HIV diagnosis to identification of NTM infection, median CD4 count at NTM diagnosis, methods of determining NTM infection, type of species of mycobacteria identified, clinical symptoms and treatment course were gathered. Twenty-four patients (20 men, 4 women) with identified NTM were included in this study. Among them, 20 were HIV late presenters. The patients' median age was 40. The main symptoms which patients presented were fever, weight loss and cough. Pulmonary disease confirmed with positive cultures from sputum/bronchoalveolar lavage was present in 18 patients. *M. avium* was the most common species identified. *M. marinum* caused disseminated skin lesions in 1 patient. Out of all, 5 people were not treated for NTM caused by lack of symptoms and suspicion of colonization with mycobacterium. Concomitant tuberculosis was present in 6 patients. The median diagnostic time from HIV to NTM infections was 3.5 months. The median CD4 count at NTM identification was 69.5 cells/ μ l. Median NTM treatment time was 16 months but 7 patients haven't finished their treatment yet. The most commonly used medications were ethambutol and clarithromycin. Among analyzed patients, 4 of them have died. NTM infections are still an important disease among patients who are HIV late presenters. This disease should be taken into consideration during the differential diagnosis of fever, weight loss and cough in people with HIV with lymphocyte T CD4 count <100 cells/ μ l. Presence of tuberculosis does not exclude nontuberculous mycobacterium coinfection.

Keywords : mycobacteriosis, HIV, late presenter, epidemiology

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