A case of missed disseminated histoplasmosis in a patient with advanced retroviral disease

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ABSTRACT

Introduction: Histoplasmosis is a systemic fungal infection caused by inhalation of *Histoplasma capsulatum* spores from the soil contaminated with bird or bat excreta. Malaysia is one of the Asian regions with pockets of endemicity for histoplasmosis based on sporadic case reports and histoplasmin skin test surveys. Histoplasmosis was also often misdiagnosed as tuberculosis (TB) as the disease is prevalent in many Asian countries. Human immunodeficiency virus (HIV) is a well-known risk factor in histoplasmosis, with a high mortality rate in this patient population. We present a case of missed disseminated histoplasmosis in an immunocompromised patient. Written informed consent was obtained from the patient to publish this case report. **Case report:** A 33-year-old male with a newly diagnosed retroviral disease and HAART naive presented with a two-week history of fever, cough, and night sweats, as well as significant weight loss. Patient worked as a spa therapist in a hotel and was unmarried. He had a history of unprotected sexual intercourse with multiple male partners. On physical examination, the patient appeared septic and had a temperature of 40 degrees. The patient was cachexic, dry, and had oropharyngeal candidiasis. The chest and abdominal examinations were unremarkable. The chest x-ray revealed homogeneous miliary nodules in both lung fields. On day 3 of his admission, he was given akurit-4 three tablets daily after a CT chest and abdomen revealed numerous ill-defined tiny nodules suggestive of military tuberculosis with intraabdominal lymph nodes. The patient was still feverish despite being on anti- tuberculous drugs for over a week and subsequently he developed pancytopenia. Following that, a bronchoscopy with transbronchial biopsy and bone marrow aspiration and trephine were performed. Transbronchial biopsy histopathology staining revealed the presence of fungal bodies, most likely histoplasmosis, and bone marrow trephine revealed dimorphic fungal bodies, indicating disseminated histoplasmosis. The patient was initiated on systemic antifungal therapy however he succumbed to death soon after. **Discussion:** This case illustrates the importance of considering fungal infections as a potential opportunistic infection especially in immunocompromised patient apart from tuberculosis. Tuberculosis is certainly an important consideration in the context of its high prevalence in developing country like Malaysia. If the patient does not respond to treatment, clinician should consider other locally unexpected opportunistic infection like histoplasmosis. Histoplasmosis and tuberculosis have comparable clinical symptoms making diagnosis difficult. Early consideration of diagnostic tests for highly clinical suspicious cases of histoplasmosis may result in a better outcome.