Letter to the Editor: Histoplasmosis in a Malawian patient on ART

L Kalongolera[1], S Kamiza[2], J Bates[1], WJ Harrison[3], JJ van Oosterhout[4]

1. Department of Orthopedics and Surgery, College of Medicine, Blantyre, Malawi

2. Department of Pathology, College of Medicine, Blantyre, Malawi

3. Beit-Cure Orthopedic Hospital, Blantyre, Malawi

We evaluated a 29 year old man with an osteolytic lesion of the right femur. The patient was well until 3 months earlier when he was hospitalized for fever without focal symptoms.

He was empirically treated with broad spectrum antibiotics and anti-malarials upon which the fever resolved. One week later pain in the right thigh developed that gradually worsened over several weeks with a poor response to non-steroidal anti-inflammatory drugs. He had no fever and denied any respiratory or other symptoms. The patient had

been treated for a tuberculous pleural effusion in 2003 that resolved after a full course treatment. He was diagnosed with HIV infection in 2005, started stavudine-lamivudinenevirapine in the same year and mentioned good adherence without significant side effects. On physical examination the only abnormality was slight swelling and tenderness of the right thigh.

An X-ray of the femur showed a large cortical erosion with periosteal reaction. Because a malignancy was considered he underwent an open biopsy of the bone. During the procedure pus was evacuated upon which the suspicion shifted to bacterial osteomyelitis and cloxacillin was started. However in the biopsy of the bone fungal organisms morphologically consistent with histoplasma were seen within the trabecular bone. The final diagnosis was therefore histoplasma osteomyelitis and intravenous antifungal treatment was initiated with good response.

Laboratory results were as follows: HIV-1 RNA < 150 copies/ml, CD4 count 210 cells/microliter, Hb 11.7 mg/dl and normal white blood cell- and neutrophil counts. Histoplasmosis has long been recognized as an opportunistic infection associated with HIV[1], often presenting as disseminated infection, severe respiratory disease[2,3] and as an immune reconstitution inflammatory response (IRIS) after initiation of antiretroviral therapy[4]. Few reports exist of patients with HIV and H. duboisii, the African form of histoplasmosis [5]. There is only one case report of histoplasmosis from Malawi, from the pre-HIV era[6]. Our patient was on long-term, successful ART, and the osteomyelitis was possibly caused by direct inoculation through the skin during intensive soil contact that he has in his work.

This case serves to remind clinicians to consider the diagnosis of histoplasmosis in patients from sub-Saharan Africa with fever, respiratory disease, oral ulcers and bone and soft tissue lesions, especially in those who are HIV infected.

References

1. Centers for Disease Control (CDC). Revision of the case definition of acquired immunodeficiency syndrome for national reporting--United States. MMWR Morb Mortal Wkly Rep. 1985;34:373-5

2. Cano MV, Hajjeh RA. The epidemiology of histoplasmosis: a review. Semin Respir Infect. 2001; 16:109-18

3. Kauffman CA. Diagnosis of histoplasmosis in immunosuppressed patients. Curr Opin Infect Dis. 2008; 21:421-5

4. Lawn SD, French MA. Immune reconstitution disease: recent developments and implications for antiretroviral treatment in resource-limited settings. Curr Opin HIV AIDS. 2007; 2:339-45

5. Loulergue P, Bastides F, Baudouin V, Chandenier J, Mariani-Kurkdjian P, Dupont B, Viard JP, Dromer F, Lortholary O. Literature review and case histories of Histoplasma capsulatum var. duboisii infections in HIV-infected patients. Emerg Infect Dis. 2007; 13:1647-52

6. Brown KG, Molesworth BD, Gjalt Boerrigter FG, Tozer RA. Disseminated Histoplasmosis duboisii in Malawi partial response to sulphonamide-trimethoprim combination. East Afr Med J. 1974; 51:584-90.