CASE REPORT

Fine Needle Aspiration Biopsy in the Diagnosis of Disseminated Histoplasmosis of the Adrenal Glands

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ABSTRACT

Disseminated histoplasmosis is a rare and potentially fatal disease caused by the dimorphic soil fungus Histoplasma capsulatum. This report is of a 66-year-old man who was initially diagnosed with a tooth abscess that was revealed to be histoplasmosis at biopsy. Subsequently, this patient presented with histoplasmosis of the vocal cords and hypoadrenalism. Computed tomography-guided biopsy accurately diagnosed the presence of bilateral adrenal histoplasmosis and he was successfully treated with itraconazole.

Key Words: Adrenal, Computed tomography, Histoplasmosis

INTRODUCTION

Histoplasma capsulatum is a dimorphic fungus that grows in its mycelial form in soil enriched by bat and avian droppings — hence the name ‘bird fever’ given to the infection. Histoplasma capsulatum infection develops when infectious spores are inhaled into the lungs where they transform into pathogenic yeast-phase organisms. Histoplasmosis has been diagnosed on all continents but endemic areas with the highest concentration of cases are found in the eastern part of the USA and most of Latin America. The endemcity of histoplasmosis in Southeast Asia is not well studied. By 1970, 13 patients from 7 countries in Asia had culturally confirmed histoplasmosis.1 Except for 1 patient in Japan, all the others were from Southeast Asia, including Indonesia, Malaysia, Thailand, and Vietnam. By 1972, another 48 patients from South and Southeast Asia had been reported.

The disease exists in 3 forms. Acute or primary histoplasmosis causes flu-like symptoms. Most patients who are infected recover without any medical intervention. Chronic histoplasmosis affects the lungs and can be fatal. Disseminated histoplasmosis affects many organ systems in the body and is often fatal. Bilateral adrenal involvement is a rare presentation of disseminated histoplasmosis. As it is an opportunistic pathogen, there is higher susceptibility of dissemination for immunodeficient or immunosuppressed patients.

During the past 2 years, several patients with disseminated histoplasmosis have presented with bilateral adrenal enlargement on computed tomography, with a positive tissue diagnosis after computed tomography-guided fine needle aspiration biopsy (FNAB).

CASE REPORT

A 66-year-old man first presented 7 years previously with vague abdominal discomfort. Computed tomography (CT) of the abdomen revealed a mass in the left lobe of the liver, a biopsy of which revealed only granulomatous inflammation. A definitive diagnosis of histoplasmosis was made after biopsy of a mandibular lesion for which this patient presented with a tooth abscess. He was treated with ketoconazole but defaulted follow-up after several months. Six months later he presented with severe weight loss and a repeat CT scan showed bilateral adrenal masses. A random serum cortisol was reported to be normal. After this he was lost to follow-up.

In January 1997, the patient attended an ear nose and throat surgeon for a hoarse voice and was found to have