CHEST

A 50-Year-Old Man Presenting With Cough and an Endobronchial Lesion After Initiation of Highly Active Antiretroviral Therapy

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A 50-year-old black man with newly diagnosed HIV/AIDS, genital herpes, and latent syphilis presented with a nonproductive cough. The patient received a diagnosis of HIV and started highly active antiretroviral therapy (HAART) with emtricitabine/tenofovir disoproxil fumarate, darunavir, and ritonavir 2 months prior to presentation. $CD4^+$ count was 1/μL and viral load was 538,884 copies/mL prior to initiation of HAART. The patient endorsed compliance with all medications since diagnosis. The patient had a persistent, dry cough at time of HIV diagnosis that had acutely worsened during the 2 weeks leading to admission. He denied fevers, chills, hemoptysis, or dyspnea but did endorse drenching night sweats.

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Physical Examination Findings

The patient was a thin-appearing man in no acute distress. Vital signs were as follows: heart rate, 123/min; BP, 139/92 mm Hg; temperature, 37.4°C; respiratory rate, 24/min; and oxygen saturation 97% while on room air. Significant physical examination findings included decreased breath sounds and faint rhonchi in the posterior left upper lung field. Cardiovascular, oropharyngeal, abdominal, and genitourinary examinations were unremarkable.

Diagnostic Studies

Laboratory data on presentation were as follows: WBC, 10^3/μL; lactic acid, 1.0 mM; $CD4^+$ count, 237/μL; HIV viral load, 646. Liver function tests and basic chemistries were unremarkable. Blood and urine cultures were

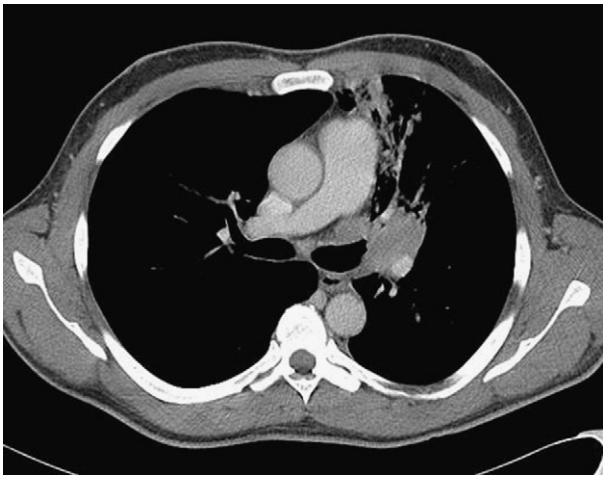

Figure 1 – *Contrast-enhanced chest CT scan showing left hilar mass with infiltration into the proximal left upper lobe bronchi and distal mainstem bronchus.*

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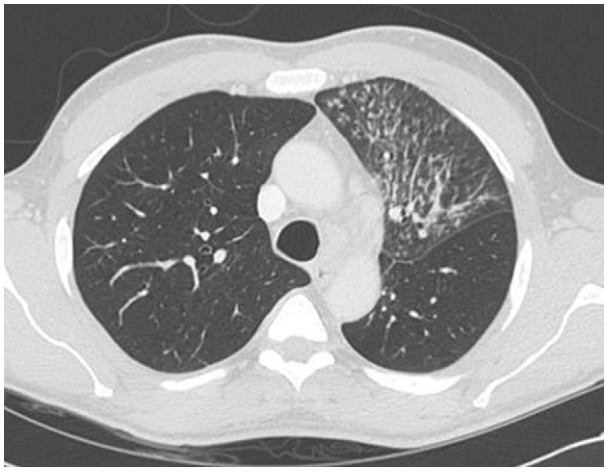

Figure 2 – *Chest CT scan showing postobstructive volume loss with patchy centrilobular micronodular opacities in the left upper lobe.*

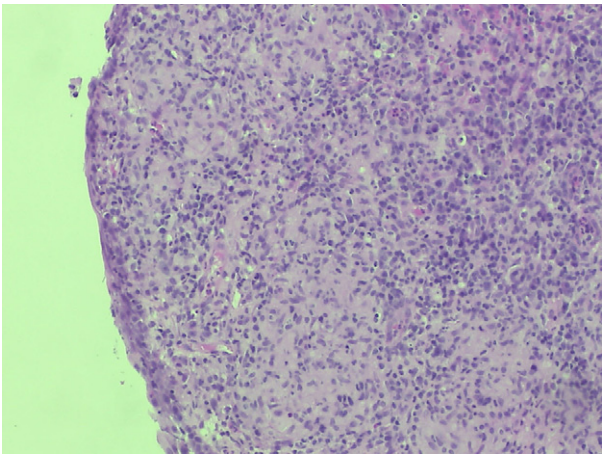

Figure 4 – *Endobronchial biopsy demonstrating an ill-defined granuloma with numerous epithelioid histiocytes (hematoxylin and eosin, original magnification × 100).*

negative. Contrast-enhanced chest CT scan showed a left hilar mass with infiltration into the proximal left upper lobe bronchi and distal mainstem bronchus (Fig 1). Left-sided mediastinal and hilar lymphadenopathy were also noted. There was also postobstructive volume loss with patchy centrilobular micronodular opacities in the left upper lobe (Fig 2). The patient underwent flexible fiber-optic bronchoscopy, which revealed two friable, polypoid, pearly endobronchial masses causing 80% and 60% obstruction of the left upper and left lower bronchi, respectively (Fig 3). Histopathologic results are shown (Figs 4, 5).

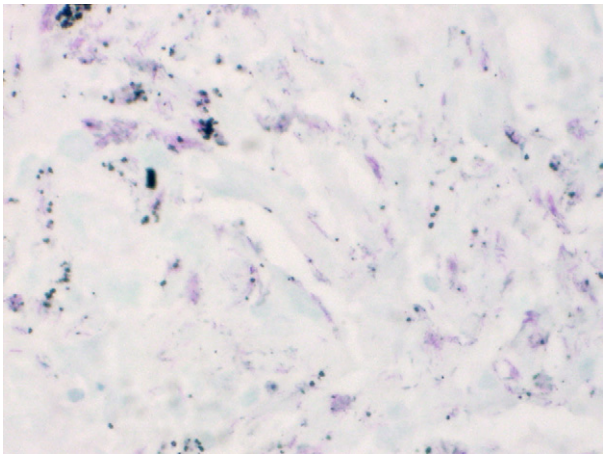

Figure 5 – *Numerous acid-fast bacilli (AFB)-positive mycobacteria within epithelioid histiocytes (AFB, original magnification × 400).*

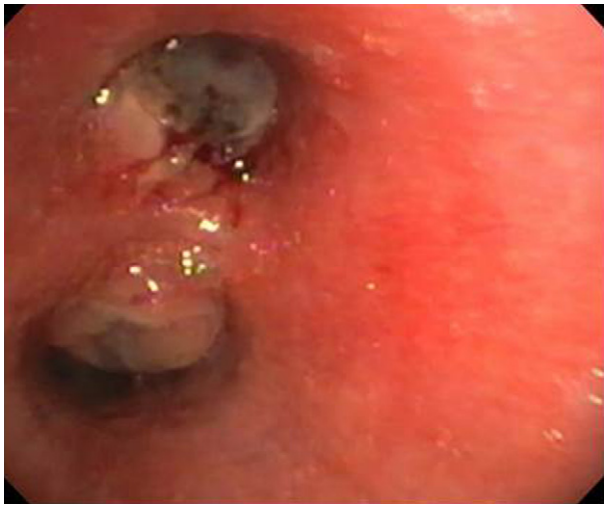

Figure 3 – *Friable, polypoid, pearly endobronchial lesions causing partial obstruction of the left upper and left lower bronchi.*

What is the diagnosis?