



Disseminated Cryptococcus Neoformans Infection with Liver Involvement in Patient with Acquired Immunodeficiency Syndrome (AIDS)

Fadi Al Akhrass^{1*}, Harty Ashby², Madison Tackett³, Salwa Nubani³ and Muhannad Antoun¹

¹Department of Infectious Diseases, Pikeville Medical Center, USA

²Department of Pathology, Pikeville Medical Center, USA

³Kentucky College of Osteopathic Medicine, USA

Clinical Image

A 30-year-old African American male presented with right upper abdominal pain and anorexia. Physical examination was unremarkable except for tender hepatomegaly. Laboratory findings revealed pancytopenia, HIV viral load of 34,020 copies/mL, CD4 count of 10/ μ L, normal liver enzymes and negative for Anti-HCV antibodies and HBV surface antigen. Imaging studies revealed hepatosplenomegaly, with a large area of ill-defined low attenuation of the right

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*Correspondence:

Fadi Al Akhrass, Department of Infectious Diseases and Infection Control, Pikeville Medical Center, Pikeville, Kentucky, USA, Tel: 606-794-6416; E-mail: fadi.akhrass@pikevillehospital.org

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Figure 1: Computed Tomography (CT) of the abdomen and pelvis with IV contrast showed of ill-defined low attenuation of the right hepatic lobe.

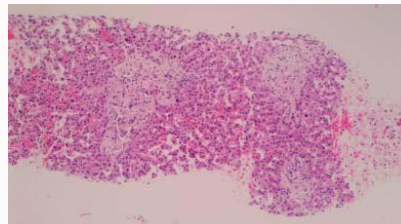


Figure 2: Liver parenchyma with non-necrotizing granulomata within the lobules (hematoxylin-eosin, original magnification x100).

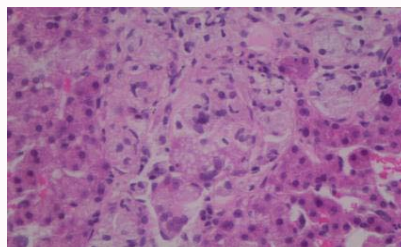


Figure 3: Non-necrotizing granuloma comprised of macrophages and multinucleate giant cells. Note how the macrophage is filled with numerous organisms. The organisms have a clear zone and occasional central nucleus (hematoxylin-eosin, original magnification x400).

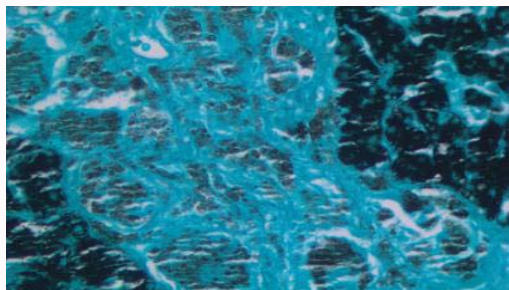


Figure 4: Gomori methenamine silver stains the cell walls and outlines the spherical encapsulated *Cryptococcus neoformans* organisms (GMS special stain, original magnification x400).

hepatic lobe (Figure 1). Liver tissue sampling showed cryptococcal granulomatous hepatitis (Figure 2-4) and the serum cryptococcal antigen was strongly positive of 1:5120. Malignancies and other opportunistic infections were excluded. The patient was treated with anti-retroviral therapy, liposomal Amphotericin-B and Flucytosine for four weeks and switched later to high-dose fluconazole with improved abdominal symptoms. In individuals with AIDS, the most common causes of liver diseases are opportunistic infections and AIDS-related neoplasms. Despite being rarely reported, Cryptococcal hepatic involvement requires early recognition, targeted diagnostics and appropriate treatment.