

## Diffuse large B-cell lymphoma presenting as acute liver failure in HCV/HIV coinfecting patient

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**Introduction:** Acute liver failure (ALF) is an uncommon disease in the United States, affecting more than 2 000 people each year. Of all the various causes, malignant infiltration is one of the least known and carries a high mortality. We describe a case of ALF as the presenting manifestation of diffuse large B-cell lymphoma (DLBCL) in an elderly man with chronic hepatitis C and HIV/AIDS.

**Case presentation:** We describe the case of a 71 year old African American man with history HIV/AIDS (recent CD4 116, viral load of 214), chronic hepatitis C, Grade 2, Stage 1 on liver biopsy, ex- intravenous drug use on methadone maintenance program, Hodgkin's disease in remission, status post chemo-radiotherapy three years prior to presentation who was brought in by a friend who noted that he was becoming increasingly weak and confused. In the emergency department (ED), triage vitals were T 97F, PR 115, BP 118/74, saturating 92% on ambient air, finger sticks was 46mg/dl. His mental status did not improve after correction of hypoglycemia. Examination was notable for lethargy, jaundice, afebrile, firm non-tender diffusely enlarged right cervical and axillary lymph nodes approximately 3 x3 cm, heart and lungs examination were unremarkable. Abdomen was not distended, soft, liver and spleen were not palpable, no ascites. He was oriented only to self and month of the year, somnolent, no signs of meningeal irritation. No asterixis, he had grade 2-3 encephalopathy. Laboratory value were remarkable for normal WBC count, thrombocytopenia (platelet count 96, 000), BUN/Cr 25mg/1.2mg/dl, AST/ALT 145 IU/L/39 IU/L respectively, Alkaline phosphatase 221 IU/L, total bilirubin 7.3mg/dl, direct bilirubin 6.0mg/dl, total protein 5.5g/dl and albumin 2.5g/dl. International normalized ratio (INR) 1.16, LDH 732 IU/L, serum alcohol level was < 3mg/dl and urine toxicology was positive for opiates and methadone. Abdominal USG showed fatty liver infiltration, mild splenomegaly, mildly distended gallbladder, no calculi, no intrahepatic biliary ductal dilatation, and common bile duct is normal in caliber. Abdominal CT with contrast showed multiple hypodense splenic lesions, confluent non-compressing circum-aortic mass, multiple para-aortic and pelvic lymph nodes, bilateral pulmonary nodules (largest is 1cm). Right axillary lymph node excision biopsy showed a poor prognosis diffuse large B-cell lymphoma. He spent 15 days as an in-patient with waxing and waning mental status, no significant response to lactulose. His LFTs continued to worsen with maximum Tbili of 10mg/dl and direct of 8mg/dl. His INR rose to 2.2. He was transferred to another facility for chemotherapy, he spent an additional week, received one cycle of chemotherapy but due to continued deterioration family requested DNR and hospice care. Patient was transferred to a hospice facility where he died after another week.

**Discussion:** Acute liver failure is a rare initial presentation of lymphoma, with less than 40 cases reported in the literature. Due to its rarity it is mostly under-recognized, thus a high degree of clinical suspicion is required. Although mortality is high (over 80%), early diagnosis and institution of chemotherapy can induce remission in some cases. Due to its rapid recurrence rates, liver transplant is contraindicated. Our patient's risk factors for non-Hodgkin's lymphoma included male sex, age, HIV/AIDS and prior chemo-radiotherapy. He also had CD markers on immunostains that have been associated with poor prognosis.

Our case represents one of the few cases of acute liver failure due to non-Hodgkin's lymphoma, and what is even peculiar about this case is our patient had Hodgkin's lymphoma that was treated with chemotherapy and radiotherapy three years prior to presentation.

### Biography

Dr. Siba is currently a PGY 2 resident in internal Medicine in Harlem Hospital Center, an affiliate of Columbia University College of Physicians and Surgeons, NY USA. He completed his MBChB degree in the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. He is a member of the West African College of Physicians, Lab Medicine. He is currently actively involved in several research papers with interest in chronic viral hepatitis.