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# Disseminated Tuberculosis Involving Bone Marrow in Alcoholic Liver Disease

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We present a case of 54 year old male with chronic alcoholic disease and decompensate ascites admitted in our hospital for recurrent epistaxis. The physical examination revealed hepatomegaly, splenomegaly and ascites. The hemogram showed, hemoglobin-12.3g/dl, Hematocrit- 39.2%, white blood cells- 2230/Ul (differential- 87% Neutrophils, 10% lymphocytes, 3% monocytes), and platelet count- 30,000/Ul. International normalized ratio was 1.43. Renal function test and electrolytes were within normal range. The biochemistry examination showed Total bilirubin- 3.4mg/dl, Direct bilirubin- 2.2 mg/dl, total protein-501 mg/dl, Albumin- 1.9 mg/dl, Globulin-3.2 mg/dl, Albumin: Globulin ratio-0.59.Alkaline phosphates- 228IU. On urine examination the urine was clear with acidic ph-6.0; grade +1 proteinuria and granular casts were seen on microscopic examination. HIV -1 &HIV together with Hepatitis B were negative.

USG abdomen showed hepatomegaly with fatty changes, altered echotexture with irregular margins. Gall bladder was edematous with dilated portal and splenic veins. There was gross ascites with splenomegaly. Periportal & peripancreatic lymph node enlargement was noted. Upper GI endoscopy revealed oesophageal ulcers and erosive gastritis. The CT scan of chest abdomen showed extensive military lung nodules with bilateral minimal pleural effusion. Liver showed hypertrophied caudate lobe with attenuation of intarhepatic IVC/ Hepatic vein, dilated porto splenic venous axis, perigastric collaterals, splenomegaly with ascites. Periportal and retroperitoneal lymph nodes were also enlarged.

Bone marrow aspiration showed a hypercellular marrow, M: E ratio 1.8:1, marcronormoblstic erythroid maturation, sequential myeloid maturation and increased megakaryocytes. Bone marrow biopsy showed hypecellular marrow infiltrated with caseating granuloma and Langhans giant cell, consistent with tuberculosis. (Figure 1 & 2). Acid fast bacilli could not be demonstrated by Ziehl-Neelsen (ZN) stain; however culture on TB Bacteria was positive.

The purpose to describe this common disease with unusual bone marrow involvement is to highlight that one should always keep Tuberculosis in differential diagnosis of long standing cases of alcoholic liver disease as the patients are not adequately immunocompetent and an aggressive diagnostic approach such as bone marrow examination should be undertaken to diagnose the disease as early as possible [1,2,3].

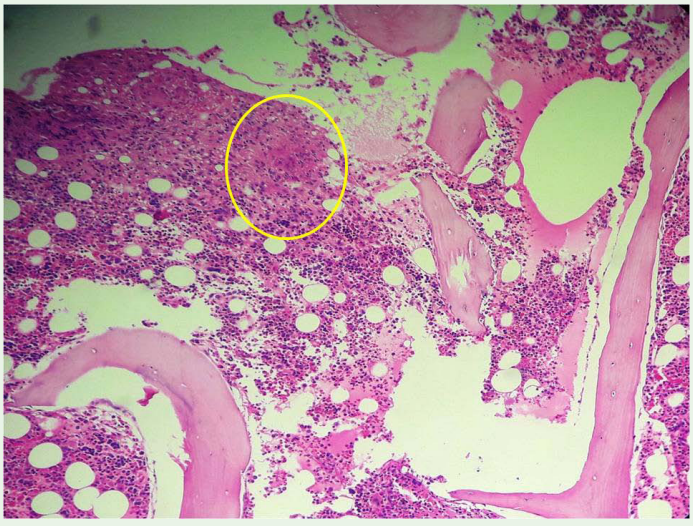

**Figure 1:** Bone Marrow biopsy showing granulaoma (H & E, 40 x).

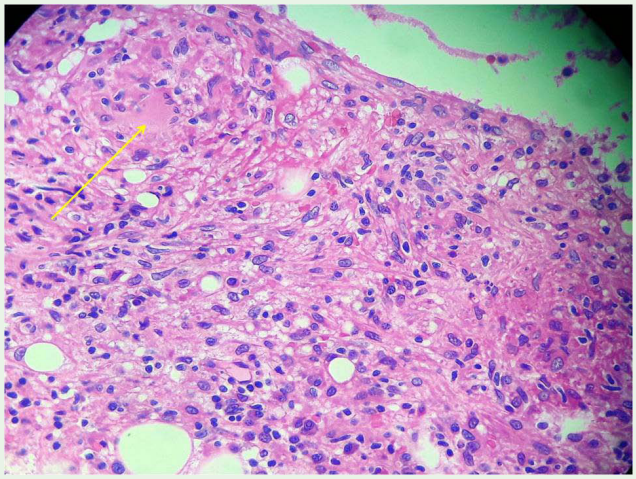

**Figure 2:** Bone Marrow biopsy showing Langhans giant cell (H & E, 40 x).

## References


1. Chen D, Yang Z, Yang Y, Zhan Z, Yang X. A Rare Case of Disseminated Tuberculosis of the Bone Marrow in Systemic Lupus Erythematosus: Case Report. Medicine. 2016; 95: e3552.
2. Avasthi R, Mohanty D, Chaudhary SC, Mishra K. Disseminated tuberculosis: interesting hematological observations. Journal of Association of Physicians of India. 2010; 58: 243-244.
3. Wang JY, Hsueh PR, Wang SK, Jan IS, Lee LN, Liaw YS, et al. Disseminated tuberculosis: a 10-year experience in a medical center. Medicine (Baltimore). 2007; 86: 39-46.