

# BONE MARROW IN THE DIAGNOSIS OF FEVER OF UNKNOWN ORIGIN

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## ABSTRACT

**Background :** The role of tissue biopsy, in the diagnosis of fever with unknown origin has been highlighted in many studies. The examination of bone marrow is diagnostic in hematological malignancies, granulomatous disorders, and hemolytic states. Bone marrow granuloma incidence is rare, ranges from 0,38%-2,2%.

**Case description :** A 60-year- old man, had intermitten fever for two months with non productive cough. He had cardiomegaly, laboratory test revealed anemia and leukopeni. The clinical diagnosis was multiple myeloma. Bone marrow biopsy showed normocellular, tuberculous granuloma, epitheloid histiocyte and Langhans giant cells. Blast cells < 10%, atypical megakaryocyte, limfocyte, mature granulocyte and light fibrotic bone marrow stroma were found with positive Ziehl-Nielsen (ZN) stain. . The histopathological diagnosis is myelitis tuberculosis. Repeated chest X-Ray revealed miliary tuberculosis.

**Discussion and Conclusion :** Possibility of miliary tuberculosis should be considered in patients with long-term fever, and other common pulmonary abnormalities. All clinical, radiological findings and granulomatous lesions in bone marrow biopsy is important to make rapid definitive diagnosis of miliary TB. The diagnosis of long-term fever with unknown origin, anemi and leucopeni should include bone marrow biopsy because of its high sensitivity in detecting specific lesions.

**Keywords :** Tuberculosis, bonemarrow, fever of unknown origin

