## A case of multiple myeloma with double malarial infection

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A 63 years old female, follow up case of Multiple Myeloma on therapy for six months, presented with high-grade fever. Her physical examination was unremarkable except anemia and fever. There was no organomegaly or lymphadenopathy. Her blood picture revealed normocytic normochromic anemia with rouleux formation and no evidence of any haemoparasite. Rapid Malaria test was negative. Her hematological parameters were Hb-8.0gm/dl, Hematocrite value-24%, MCV-92FL, TLC-2,600/mm³, Polymorphs (Neutrophils) count of 1000/mm³, Lymphocytes –1,200/mm³, Monocytes count-400/mm³ and Platelet count of 130,00/mm³. The E.S.R. was 155mm in 1st hour (Westergren method). All the biochemical tests were normal except creatinine, which was

mildly increased (2.0mg/dL). The bone marrow aspirate smears showed plasmacytosis. Plasma cell population predominantly comprised of plasmablast, intermediate plasma cells and few mature forms. Gametocyte of Plasmodium falciparum was seen along with ring forms (double as well as single), which was suggestive of double infection (Plasmodium falciparum with Plasmodium vivax).

A final diagnosis of residual disease (Multiple Myeloma) along with malarial (double) infection was made and patient responded well to antimalarial therapy and discharged.

This case is also important in this aspect that it was negative for Rapid Malaria test on peripheral smear examination but double malarial infection was present in marrow.

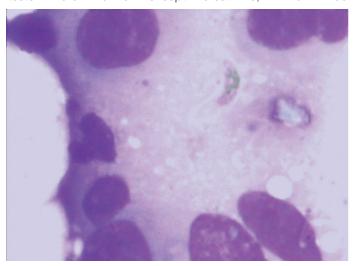


Figure 1. Bone Aspirate showing gametocyte of Plasmodium falciparum along with a plasmablast (Jenner-Giemsa 100x)

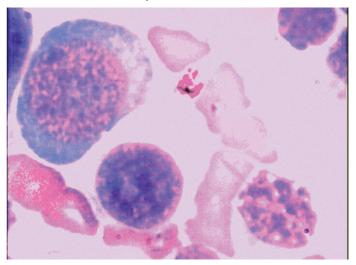


Figure 2. Bone marrow aspirate smear showing gametocyte of Plasmodium falciparum, trophozoite of Plasmodium vivax and plasma cell (Jenner –Giemsa x100)

## References

- Vella FS, Simone B, Giannelli G, Pesolo M, Ingravallo G, Gentile A et al. Case of multiple myeloma mimicking an infectious disease with fever, intrahepatic cholestasis, renal failure and pulmonary insufficiency. Am J Hematol 2003; 72: 38-42.
- 2. Mueller PS, Terrell CL, Gertz MA. Fever of unknown origin caused by multiple myeloma: A report of 9 cases. Arch Intern Med 2002; 162: 1305-09.
- Nicola M, Marco C, Roberto I, Serena V. Multiple myeloma in a patient with fever of unknown origin and cholestasis.CMAJ 2004; 170: 1809-10