

3<sup>rd</sup> International Conference on

# Hematology & Blood Disorders

November 02-04, 2015 Atlanta, USA

## Infectious and non infectious manifestations in the bone marrow in HIV in India

Parul Sobti, Vikram Rajgopalan, Richa Gupta and Tejindar Singh  
Delhi University, India

**Introduction:** HIV is associated with a variety of hematological manifestations including cytopenias in one or more cell lines in peripheral blood associated with hypo/ hyper cellular marrow showing dysplasia, lymphoplasmacytosis and lymphoid aggregates. With progression of disease and a fall in CD4 count, there is an increased risk of developing secondary infections and malignancies.

**Introduction:** Patients with HIV present with fever and peripheral blood abnormalities. These may be due to disseminated opportunistic infections, myelodysplasia, aplasia or neoplastic disorders.

**Aims:** The objective of this study was to evaluate the diagnostic yield of bone marrow samples from HIV patients with fever and/or cytopenias in a tertiary care hospital in India.

**Materials and Methods:** The study was carried out from January 2010 to July 2015 in the Departments of Pathology and Medicine, Maulana Azad Medical College. 150 symptomatic patients presenting with cytopenias, pyrexia of unknown origin and suspected hematological malignancies were evaluated. Additional investigations like Immunocytochemistry and flowcytometry was done in cases wherever indicated.

**Observations:** Hemogram findings revealed anemia in 94.6%, leucopenia in 43.4% and thrombocytopenia in 51.3% patients. The commonest findings in marrow were plasmacytosis (73%), infiltration by macrophages (35.1%) haemophagocytosis (18.9%) and dysplasia in one or more lineages (56.8%). There was granuloma formation in 37.8% patients with positivity for AFB in 20 cases. A solitary case of disseminated MAC infection was diagnosed. 4 cases of histoplasmosis, 2 cases of cryptococcosis, 2 cases of *Lishmania donovani* and a case of *Plasmodium falciparum* infection were noted. 10 cases of Non Hodgkin and 3 cases of Hodgkin lymphoma were also seen.

**Conclusion:** There is a wide spectrum of hematological findings observed in HIV infection. Bone marrow biopsy is essential to identify granulomas which are not detected in aspirate and imprint smears. They can also be a more rapid method to diagnose tuberculosis and for staging of lymphomas. Thus bone marrow is a useful diagnostic procedure in management of patients with HIV.

## Biography

Dr. Parul Sobti has completed her MD, DNB from Maulana Azad Medical College, Delhi University.

## Notes: