Hematological manifestations in patients with newly diagnosed pulmonary tuberculosis

Introduction

Tuberculosis (TB), particularly TB is still a major public health problem of the world. Pulmonary eosinophilia, Hypereosinophilia, Reactivevethrombocytosis, Thrombocytopenia, Disseminated intravascular coagulation, Deep venous thrombosis, Henoch-Schönlein purpura, Leukocytosis with neutrophilia, Lymphocytopenia, Monocytopenia, Lymphocytosis, Severe leucopenia, Idiopathic thrombocytopenic purpura, Pancytopenia. Could be found in patients with newly diagnosed pulmonary TB.

Hereditary glucose-6-phosphate dehydrogenase deficiency and pulmonary tuberculosis

A study in Azerbaijan, a state of former Soviet Union demonstrated that the etiological role of this abnormality as a genetic marker for pulmonary TB was 14% in associated pulmonary tuberculosis and alcoholism, it grew to 18%. Another study in this region also showed a high incidence of this hereditary disorder among patients with pulmonary TB.

Hematological malignancies and pulmonary tuberculosis

Pulmonary TB have been reported among patients with acute myeloid leukemia, chronic myeloid leukemia, acute lymphocytic leukemia, Hodgkin’s disease, T-cell lymphoma and myelodysplastic syndrome.

Sickle cell disease and tuberculosis

Sickle cell disease was reported in patients with TB in France and Africa. Many reports suggest that severe pulmonary TB in association with reduced tissue cellular reaction may cause blood dyscrasias. Anemia was present in 32% of cases. Leucopenia with neutropenia and lymphopenia was seen in 15% of patients with very severe clinical TB. Active tuberculosis was associated with significant reductions in absolute numbers of B lymphocytes, but there were no significant differences in total T8-cell counts. There was reversal of T4/T8 ratio due to T4 lymphopenia. A study in Nigeria showed that 95% had normochromic picture while 5% demonstrated reductions in absolute numbers of B lymphocytes, but there were no severe clinical TB. Active tuberculosis was associated with significant neutropenia and lymphopenia was seen in 15% of patients with very severe clinical TB. Associated pulmonary tuberculosis with transient protein S deficiency. Scand J Infect Dis. 2002;34(5):393–394.

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Conflict of interest

The author declares no conflict of interest.

References

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