

10th World

HEMATOLOGY AND ONCOLOGY CONGRESS

October 22-23, 2018 Warsaw, Poland

Spectrum of bone marrow changes in patients of chronic kidney disease

Rabbia Khalid¹ and Brig Saqib Qayyum Ahmad²

¹Rawalpindi Medical University, Pakistan

²National University of Medical Sciences, Pakistan

Statement of the Problem: Chronic Kidney Disease (CKD) is a health problem present worldwide. CKD is a collective term covering a number of primary disease processes resulting in structural or functional kidney abnormalities or both persisting for at least 3 months. It is related with premature mortality and decreased quality of life. Untreated cases can end up in End Stage Renal Disease (ESRD) finally necessitating dialysis. In Pakistan more than 21 million people are affected by this disease. Almost every patient of advanced CKD suffers from some degree of hematological abnormalities. The purpose of this study is to analyze various hematological manifestations of advanced stage CKD in peripheral blood and Bone Marrow (BM) of the patients, referred to us from the nephrology unit of our tertiary care medical set up.

Method: Patients of both genders and all age groups with CKD stage III, IV and V were included in this study. Patient's histories were recorded. Complete blood counts, bone marrow aspiration and trephine biopsies were done and evaluated microscopically. Mean blood counts of the patients in three groups of CKD were compared. Frequencies of various bone marrow findings in CKD patients were calculated.

Findings: Out of 57 patients, 41 (71.9%) were males while 16 (28%) were females. Mean age was 60 years. There was no statistically significant difference between the mean hemoglobin, mean white cell count and mean platelet count of the patients in three groups of CKD. Reactive changes due to underlying CKD and inflammation were the most frequent finding in the BM of the patients.

Conclusion: Anemia of mild to moderate severity and reactive changes in the BM are the most frequent hematological findings encountered in patients suffering from advanced stage CKD. Since CKD is predominantly a disease of the elderly so it is not rare to find the co-morbidities including plasmacytosis, malignancies and their effects on the BM in the patients of CKD.

Recommendations: We should focus our attention on primary prevention of anemia by strictly adhering to the treatment guidelines, adapting healthy life styles and dietary modifications as early recognition can slow the progression of the disease to ESRD. Public awareness is very essential to halt the advancement of disease.

brittle_star44@hotmail.com