International Journal of Bone Marrow Research

Volume - 1, Issue - 1

Research Article Published Date:- 2017-07-11

Pure Erythroid Leukemia: The Sole Acute Erythroid Leukemia

Pure Erythroid Leukemia (PEL) is an aggressive and exceedingly rare form of acute leukemia. In the 2008 WHO classification PEL was one of the subtypes of acute erythroid leukemia the other subtype being erythroleukemia (erythroid/ myeloid). In the 2016 WHO classification update, erythroleukemia was merged into myelodysplastic syndrome and PEL now is the only type of acute erythroid leukemia.106 cases of acute myeloid leukemia were diagnosed in 28 months in children's hospital Lahore and PEL constituted 0.94%. Diagnosis of PEL is made by the bone marrow morphology showing predominant Immature erythroid precursors (proerythroblastic or undifferentiated), Periodic Acid- Schiff staining and immunophenotyping. In PEL no specific genetic mutations have been described but complex karyotypes and TP53 mutations are frequently noted. Future collaborative studies to identify the molecular defects will contribute to the development of targeted therapies that might improve the prognosis.