a Retinoid Acid Receptor in Acute Promyelocytic Leukemia Auer Rods

Abstrak:

Acute Promyelocytic Leukemia (APL) is a subtype of AML with a defined clinical course and biology that is distinct from other forms of AML. The term M3-AML was assigned to the hyper granular promyelocytic leukaemia that is characterized by blast cells with azurophilic granules, bundles of auer rods and reniform or bilobed nucleus. Clinically, APL is related to disseminate intravascular coagulation and abnormal fibrinolysis. Cytogenetically, APL may cause translocation on the promyelocytic leukaemia (PML) gene, and chromosome 15 and with the retinoic acid receptor α (RARA) gene, on chromosome 17. The diagnosis of APL is shown by bone marrow morphologically. The majority of cells in the bone marrow are abnormal, having some similarities with promyelocytes. The malignant cells bear numerous large granules and several auer rods. Aspirates of bone marrow are also taken for cytogenesis evaluation and for detecting the translocation. A twelve years girl was admitted to the hospital with haemorrhage from the gums during 5 day after extraction of a tooth. On physical examination there is no organomegaly shown. The laboratory examination found normocytic normochromic anaemia, leucopenia and thrombocytopenia with 15% blast cell and 5% promyelocytes with multiple auer rods. The bone marrow aspirates showed predominant of promyelocyte cells (70%) with multiple auer rods.

Keyword:

APL, Auer rod, Promyelocytic leukaemia, retinoid acid receptor α