

## **Normoblast Counting between Acute Myeloblast Leukemia and Acute Lymphoblastic Leukemia in Peripheral Blood Smear of Patients**

### **Abstrak :**

*Normoblast is an immature form of erythrocyte in erythropoietin system. Normally, normoblast can be found in peripheral blood healthy neonates. The existence of normoblast in peripheral blood might be the sign of pathologic conditions such as hemolytic anemia, acute blood loss, and ischemia and bone marrows abnormalities like malignancy or leukemia. In acute leukemia (Acute Myeloblastic Leukemia and Acute Lymphoblastic Leukemia), normoblast existence in peripheral blood may due to erythropoietin system suppression. The aim of this study is to compare normoblast count between AML and ALL, and also to find out the correlation between leukocyte and normoblast count in AML and ALL. The subject of this study were patient diagnosed as AML (30) and ALL (30) in Hematology Division of Clinical Pathology Department at Dr.Hasan Sadikin Hospital Bandung in July 2006&ndash;August 2008. In this study we examined 30 peripheral blood smears from AML and 30 peripheral blood smears from ALL. Leukocyte count result was derived from CBC performed with Sysmex KX-21. The mean value of normoblast count from AML blood smear patients is 1930.60 (3.60/100 WBC) while ALL blood smear patients is 309.60 (0.43/100 WBC). Statistically this difference is significant ( $p < 0.001$ ). There are strong correlation between leukocyte count and normoblast count within both group ( $r = 0.851$ ,  $r = 0.948$ ;  $p < 0.001$ ).*

### **Keyword :**

*Normoblast, AML, ALL, leukocyte*