ABSTRACT

CORRELATIVE STUDY BETWEEN NUTRITIONAL STATUS AND REMISSION OUTCOME IN CHILDHOOD ACUTE LYMPHOBLASTIC LEUKEMIA IN DR SOETOMO HOSPITAL SURABAYA

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The most common malignancy that is diagnosed in children is acute lymphoblastic leukemia. Undernourished children tend to have poorer long term survival. This descriptive analytic study is aimed towards analyzing the correlation between nutritional status at diagnosis and outcomes of induction phase therapy in childhood acute lymphoblastic leukemia at the Department of Pediatrics Dr. Soetomo Hospital in 2014. A cross-sectional method using the medical records of patients is used in this study. The nutritional status of patients are calculated using weight for length/height trough curves of WHO 2006 or CDC 2000. The results show that from 45 children diagnosed with ALL in 2014, approximately 53% are of the age ≤ 5 years old, with 58% being males and 42% being females. 13% of the patients are in the high risk group and 87% are in the standard risk group. 2% obese are in remission, 62% normal with 82% of them in remission and 18% not in remission; and 36% underweight (9% thin, 27% very thin) with 87.5% of them in remission and 12.5% not in remission. In conclusion, there is no correlation between nutritional status and remission outcome of patients with ALL in the induction phase of therapy (p=0.790).

Keyword: childhood acute lymphoblastic leukemia, induction phase therapy outcomes, nutritional status