

ABSTRACT

**THE RELATIONSHIP BETWEEN CHARACTERISTIC AND LABORATORIUM RESULT WITH THE OUTCOME OF FEBRILE NEUTROPENIA IN CHILDREN WITH ACUTE LYMPHOBLASTIC LEUKEMIA (ALL) IN INPATIENT CARE FACILITY OF THE HEMATOLOGY - ONCOLOGY DIVISION DEPARTMENT OF CHILDHEALTH DR. SOETOMO GENERAL HOSPITAL SURABAYA
JANUARY 2017 - JUNE 2017**

Background: Febrile Neutropenia (FN) is a fever occurring in patients with neutropenia, where neutrophils have a lower number than a person's standard of health. This fever can cause serious complications in children. Despite major advances in the prevention and treatment of febrile neutropenia, it remains one of the most common complications of cancer chemotherapy, and is a major cause of morbidity. Studies from developed countries have reported the importance of prompt management and outcomes of FN in pediatric cancer. However, reports from developing countries are lacking; only few have been published in Indonesia. This study aimed to look for relationship between characteristic and laboratorium result with outcomes of febrile neutropenia in children with acute lymphoblastic leukemia (ALL), a leading cause of FN in pediatric cancer patients, managed at the Division of Hematology Oncology Departement of Childhealth Dr Soetomo General Hospital from January 2017 to June 2017

Method: This was an analytic descriptive prospective observational study to search for relationship between characteristic and laboratorium result with outcomes of febrile neutropenia in ALL patients .The method used was data collection through primary data implementing a total sampling.

Results: Of the 30 samples, FN was found in ALL children with the highest percentage of deaths. The age average was 5 years over 7 month There was no significant difference between male and female. The highest mortality rate was observed in high risk (HR) ALL where 7 patients (38.7%) died. Three patients (50%) belonged to the age group below 1 year and above 10 years, 4 patients (57.1%) had an ANC below 100 cells/mm³. five patients (71,4%) had a length of stay over 30 days, 7 children (70%) experienced fever more than 15 days, and 6 cases (66.7%). had a neutropenia longer than 25 days. The mostly encountered infection was pneumonia, seen in 5 patients (62.5%)

Conclusion: The lenght of stay and duration of fever are significantly related with the outcomes of febril neutropenia in children with ALL (p=0,048 and p= 0,044)

Keywords: acute lymphoblastic leukemia (ALL) , febrile neutropenia, risk stratification, age , sex , ANC , length of stay, duration of fever, duration of neutropenia, infection