ABSTRACT

ANTIMICROBIAL PROFILE IN ACUTE LYMPHOBLASTIC LEUKEMIA (ALL) PATIENT WITH FEBRILE NEUTROPENIA
(Study at Department of Child Health Dr. Soetomo Teaching Hospital Surabaya)

Febrile neutropenia is a neutropenic condition with absolute neutrophil count <500/mm³ and fever with body temperature ≥38°C. Fever neutropenia is commonly occurs in patient with acute lymphoblastic leukemia (ALL) because of failed hemopoiesis process in ALL patient and chemotherapy that undertaken by patient. Febrile neutropenia should be treated immediately to cured bacteremia condition and prevent severe infection.

The aim of this study were to describe the antimicrobial profile in acute lymphoblastic leukemia patient with febrile neutropenia, including type of antimicrobial drug, dosage, route of administration, time and duration of antimicrobial drug use and to identify actual and potential Drug Related Problems (DRPs). This study was a retrospective study by using descriptive analysis in acute lymphoblastic leukemia patient with febrile neutropenia at Department of Child Health Dr. Soetomo Hospital Surabaya on period January 1st until December 31st 2011 (N=31).

The result showed that most common used antimicrobial drug were ampicillin-sulbactam, meropenem, flukonazol. Other antimicrobial drug that also used in patient therapy were gentamycin, metronidazol, erythromycin, clindamycin, and cloxacilin. Doses and frequency were appropriate to literature. The potential drug related problems were the adverse drug reaction of ciprofloxacin (3%) and aminoglycoside (10%) and a actual and a actual drug related problem were empiric antimicrobial use in too long term (>10 days) (42%).

Keywords: Febrile neutropenia, antimicrobial drug, Acute Lymphoblastic Leukemia, ALL, children with febrile neutropenia, febrile neutropenia in pediatric, ALL in pediatric, antimicrobial profile