ABSTRACT

THROMBOCYTE COUNT PATTERN IN DENGUE VIRUS PATIENT IN PEDIATRIC DEPARTMENT OF DR. SOETOMO STATE/TEACHING HOSPITAL DURING JANUARY – JUNE 2015 PERIOD

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Background: Dengue is a disease caused by four serotypes of dengue virus which are related to each other (DENV-1, -2, -3, -4). Thrombocytopenia is one of the laboratory parameters issued by WHO to diagnose dengue virus infection.

Objective: to study the thrombocyte count pattern in dengue pediatrics patient with infection to improve understanding and alertness to its sign and symptom.

Method: This is a descriptive analytical study with a retrospective approach using secondary data from DF and DHF patients’ medical records in Dr. Soetomo state/teaching hospital during January – June 2015 period. Thrombocyte count data based on patients’ days of sickness were collected and analyzed descriptively. Hypothesis testing used independent sample t-test.

Result: Of 123 children, are female (51,2%). Dengue infection is mostly found in children >5 years old (65,9%). Since Soetomo Hospital is a tertiary referral hospital, most patient were DHF (54,5%) mainly with shock (39,8%). In their 3rd day of sickness, DF patients still have normal thrombocyte count, which starts decreasing in their 4th day. The lowest count was on the 5th day, starts increasing in 6th day onto recovery phase on the 7th day. While in DHF patients, their thrombocyte count has already dropped on 3rd day, keeps decreasing to its lowest point on the 5th day. It starts increasing on the 6th day onto recovery phase on the 7th day. In DHF patients without shock, thrombocyte count in their early fever phase (3rd day) is still within normal range, but starts decreasing on the 4th day and reaches its lowest point on the 5th day, starts increasing on 5th day and enters recovery phase on the 7th day. The mean thrombocyte count in DHF with shock was different: it decreases in early fever phase on 3rd day, reaches its lowest point on 6th day. It starts increasing on 7th day onto recovery phase on 8th day. Based on day of sickness, significant thrombocyte count difference was found on 3rd, 4th, 5th, 6th day (p<0,001) and 8th day (p=0,012). Of DHF patients with and without shock, significant thrombocyte count difference was found (p=0,004)in the sixth day.

Conclusion: There was a significant thrombocyte count difference between DF and DHF patients on particular days of sickness so that different thrombocyte pattern were found.

Keywords: Dengue Fever (DF), Dengue Haemorrhage Fever (DHF), thrombocyte, day of sickness, age, sex