ABSTRACT

Profile Routine Hematology and Serological Antibody IgM, IgG and Antigen NS1 to Diagnose Dengue Virus Infection in Adult Patients at RSUD Dr. Soetomo Surabaya during January – Desember 2015

Karisma Septari Idamusaga*, Aryati**, Musofa Rusli***

*Mahasiswa Prodi S1 Kedokteran Universitas Airlangga

** Staf Departemen Ilmu Patologi Klinik Fakultas Kedokteran Universitas Airlangga Surabaya / Rumah Sakit Umum Daerah Dr. Soetomo Surabaya

*** Staf Departemen Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Airlangga Surabaya / Rumah Sakit Umum Daerah Dr. Soetomo Surabaya

Background : Dengue virus infection consists of dengue fever and dengue hemorrhagic fever that can infect human at any age, transmitted to humans through mosquito bites an infected female Aedes. The result of routin hematology and serology is used to confirm dengue virus indection in diagnoses. **Objective :** To observed the profile of routin hematology and serological antibody IgM, IgG and antigen NS1 to diagnose dengue virus infection in adult patients at RSUD Dr. Soetomo Surabaya during January – Desember 2015. **Methods :** The study design was observational descriptive study which observed routine hematology as trombocytes, leukocytes, neutrophil, lymphocytes, hematocrit, hemoglobin and serology IgM, IgG, NS 1. This study used medical records of adult patients dengue virus infections in RSUD Dr. Soetomo Surabaya during January – Desember 2015. **Result :** From 93 patients with dengue virus infection, 35(37,63%) patients diagnose as dengue fever, 58(62,37%) patients diagnose as dengue hemorrhagic fever. Female 49(52,69%), male 44(47,31%), ranged between age 18 up to 86 year old. Routine hematology in febrile phase was not many data found, critical phase there were trombocytopenia 10-50(x10³/µl)(29,03%), leukopenia ≤5(x10³/µl)(49,46%), neutrophila (32,26%), normal lymphocyte (44,09%), normal hematocrit (61,29%), normal hemoglobin (69,89%), in the convalescence phase there were dominant trombocytopenia ≥10–100(x10³/µl)(47,32%), normal leukocytes(32,26%) leukopenia≤5(x10³/µl)(32,26), lymphocytosis(36,56%), normal hematocrit (49,46%), normal hemoglobin (46,24%). From 93 patients there were 63(67,74%) patients had a serological IgM IgG test with ELISA (63,49%) and ICT (36,51%). Serological result IgM - and IgG - (49,2%), IgM +/- and IgG + (42,86%), IgM + IgG – (7,94%). Larger proportion examination serological test on day 4th to 7th (49,21%). From 93 patients there were 14 patients (15,05%) had a NS1 test. Positif NS1 (35,71%), negative (64,29%). Larger proportion examination serological test on day 4th to 7th (57,14%). **Conclusion :** in the critical phase found trombocytopenia, leukopenia, neutrophilia, normal lukocytes, hematocrit and hemoglobin. In the convalescence phase found lymphocytosis, hematocrit and also hemoglobin was normal. The negative results of IgG IgM did not exclude the diagnose of dengue virus infection, but a positive result of IgM and IgG can be helpful in diagnosed

Keyword : Dengue virus infection, dengue hemorrhagic fever, dengue fever