ABSTRACT

Dengue virus infection causes varied clinical manifestation and require specific diagnostic examination. IgA anti-dengue as one of the diagnostic markers of dengue virus infection is suspected to have a shorter life-span and greater sensitivity in detecting secondary infections than IgM anti-dengue. IgA anti-dengue profile toward day of fever, virus serotype, severity, platelet count and type of infection is less known. This study was conducted using 34 sera with positive RT-PCR and/or NS1 dengue. Samples were examined according to indirect immunochromatographic method using AIM Dengue IgA Assure Rapid Test. The overall sensitivity of IgA anti-dengue were 61.76% (n=34); in which IgA anti-dengue detected 14.29% primary and 66.67% secondary cases. IgA anti-dengue detected DEN1, DEN2, DEN3 and Mixed DEN1 – DEN3 virus serotype respectively 55.56%, 22.22%, 16.67% and 5.56% (n=20). The day of fever was dominated by day-4 and day-5 respectively 28.57% (n=21). IgA anti-dengue detected in DD, DHF grade I, II and III respectively 42.86%, 28.57%, 19.05% and 9.52% (n=21). IgA anti-dengue detected on all level of platelet count, it detect 60% in < 50,000 cell/mm³, 30% on 50,000 - 100,000 cell/mm³ and 10% on > 100,000 cell/mm³ platelet count sample (n=20). This result demonstrated that IgA anti-dengue can be found in both primary and secondary case, all dengue virus serotype and all degree of severity. In conclusion IgA anti-dengue is applicable as one of the dengue diagnostic parameters on detecting dengue virus infection.

Keywords: dengue, IgA anti-dengue, AIM Dengue IgA Assure Rapid Test