

Perbandingan Kadar *C-Reactive Protein (CRP)* Metode Aglutinasi dan *Fluorescence Immunoassay (FIA)* Pada Infeksi *Virus Dengue*

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ABSTRAK

Latar belakang : infeksi adalah proses di mana mikroorganisme, termasuk virus, masuk ke dalam tubuh manusia atau hewan. Demam dengue ialah penyakit akibat infeksi dari virus dengue yang disebarkan nyamuk *Aedes aegypti* serta *Aedes Albopictus* (Renowati & Safridana, 2020). *C-Reactive Protein* yang dialami penderita DBD ini memiliki trombosit yang rendah ketika fase demam yang mengakibatkan terjadi inflamasi. Terdapat beberapa metode untuk mengetahui kadar CRP dalam darah seperti metode aglutinasi dan metode *Fluorescence Immunoassay (FIA)*. **Tujuan** dilakukannya penelitian ini guna mengidentifikasi perbandingan kadar *C-reactive Protein (CRP)* metode aglutinasi dan *Fluorescence Immunoassay (FIA)* pada infeksi virus *Dengue*. **Metode** yang dipakai yakni analitik dalam pendekatan cross-sectional yang dikerjakan di Klinik Utama Prima Surabaya. Penelitian ini memakai sampel penderita DBD di Klinik Utama Prima Surabaya sebanyak 40 orang. **Hasil** penelitian ini didapatkan sebagian besar hasil pemeriksaan CRP metode aglutinasi menunjukkan hasil negative sebanyak 31 orang (77,5%) dan hasil CRP negative 9 orang (22,5%). Hasil pemeriksaan CRP metode *Flourescence Immunoassay (FIA)* didapatkan hasil meningkat Sebanyak 31 orang (77,5%) memiliki kadar CRP yang tinggi, sedangkan 9 orang (22,5%) memiliki kadar CRP yang normal. **Kesimpulan** penelitian ini membuktikan tidak ditemukan perbedaan signifikan kadar CRP antar metode aglutinasi dengan FIA yang dialami penderita DBD.

Kata kunci : *C-Reactive Protein*, *aglutinasi*, *Flourescence Immunoassay*, dan *dengue*.

Comparison of “C-Reactive Protein (CRP) Levels by Agglutination Method and Fluorescence Immunoassay (FIA)” in Dengue Virus Infection

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ABSTRACT

Background: infection is a process in which microorganisms, including viruses, enter the human or animal body. Dengue fever is a disease caused by infection with the dengue virus which is spread by the *Aedes aegypti* and *Aedes Albopictus* mosquitoes (Renowati & Safridana, 2020). C-Reactive Protein experienced by dengue fever sufferers has low platelets during the fever phase which causes inflammation. There are several methods to determine CRP levels in the blood such as the agglutination method and the Fluorescence Immunoassay (FIA) method. **The purpose** of this study was to identify the comparison of C-reactive Protein (CRP) levels using the agglutination method and Fluorescence Immunoassay (FIA) in dengue virus infection. **The method** used is analytical in a cross-sectional approach carried out at the Prima Utama Clinic, Surabaya. This study used a sample of 40 dengue fever sufferers at the Prima Utama Clinic, Surabaya. The results of this study obtained that most of the CRP examination results using the agglutination method showed negative results as many as 31 people (77.5%) and negative CRP results in 9 people (22.5%). The results of the CRP examination using the Fluorescence Immunoassay (FIA) method showed increased results. As many as 31 people (77.5%) had high CRP levels, while 9 people (22.5%) had normal CRP levels. **The conclusion** of this study proves that there is no significant difference in CRP levels between the agglutination method and FIA experienced by DHF patients.

Keywords: C-Reactive Protein, agglutination, Fluorescence Immunoassay, dengue