

## ABSTRAK

### HUBUNGAN DERAJAT KLINIS DEMAM BERDARAH DENGUE TERHADAP AKTIVITAS *ALANINE AMINOTRANSFERASE* DAN *ASPARTATE AMINOTRANSFERASE* PADA PASIEN ANAK DI RSUD Dr. H. ABDUL MOLOEK

Oleh  
FEBILLA NAILI ALFALAH

**Latar Belakang:** Demam Berdarah Dengue (DBD) ialah penyakit infeksi tropis yang dapat menyebabkan keterlibatan organ hati. Derajat klinis DBD diklasifikasikan sebagai dengue dengan warning signs dan severe dengue, yang dapat mempengaruhi kadar enzim hati, yaitu *Alanine Aminotransferase* (ALT) dan *Aspartate Aminotransferase* (AST), sebagai indikator disfungsi hati. Penelitian ini ditujukan guna mengetahui hubungan antara derajat klinis DBD dengan aktivitas enzim ALT dan AST pada pasien anak di RSUD Dr. H. Abdul Moloek.

**Metode:** Penelitian ini menggunakan desain analitik observasional dengan pendekatan *cross-sectional* dan bersifat retrospektif. Sampel berjumlah 49 anak yang dirawat dengan diagnosis DBD pada periode Januari 2020–Juli 2024 yang memenuhi kriteria inklusi. Data didapat melalui rekam medis dan dianalisis menggunakan uji korelasi Gamma.

**Hasil:** Pada penelitian ini didapati 49 sampel pasien anak terdiagnosis DBD; 53,1% diantaranya berjenis kelamin laki-laki dengan rentang usia terbanyak 6-15 tahun. Derajat klinis DBD didominasi oleh *severe dengue* sebanyak 51%. Pada hasil analisis didapatkan korelasi yang sangat kuat dan bermakna antara derajat klinis DBD dengan kadar ALT ( $p\text{-value} = 0,000$ ;  $r = 0,927$ ) dan kadar AST ( $p\text{-value} = 0,000$ ;  $r = 0,906$ ).

**Kesimpulan:** Terdapat hubungan yang bermakna dan korelasi yang sangat kuat antara derajat klinis DBD dengan aktivitas ALT dan AST pada pasien anak yang dirawat di RSUD Dr. H. Abdul Moloek. Pemeriksaan kadar enzim hati bisa menjadi indikator krusial pada penilaian keparahan klinis DBD.

**Kata Kunci:** ALT, Anak, AST, Demam Berdarah Dengue, Derajat Klinis

## ABSTRACT

### RELATIONSHIP OF CLINICAL DEGREE DENGUE HEMORRHAGIC FEVER TO ALANINE AMINOTRANSFERASE AND ASPARTATE AMINOTRANSFERASE ACTIVITY IN PEDIATRIC PATIENTS AT Dr. H. ABDUL MOLOEK HOSPITAL

By

FEBILLA NAILI ALFALAH

**Background:** Dengue hemorrhagic fever (DHF) is a tropical infectious illness that may impact liver function. Clinically, dengue is categorized into dengue with warning signs and severe dengue, both of which can influence liver enzyme levels, specifically Alanine Aminotransferase (ALT) and Aspartate Aminotransferase (AST), serving as markers of hepatic dysfunction. The purpose of this study was to determine the relationship between the clinical degree of DHF and ALT and AST enzyme activities in pediatric patients at Dr. H. Abdul Moloek Hospital.

**Methods:** This study used an observational analytic design with a cross-sectional approach and was retrospective. The sample amounted to 49 children who were treated with a diagnosis of DHF in the period January 2020-July 2024 who met the inclusion criteria. Data were obtained from medical records and analyzed using the Gamma correlation test.

**Results:** In this study, 49 samples of pediatric patients diagnosed with DHF were obtained; 53.1% of them were male with the highest age range of 6-15 years. The clinical degree of DHF was dominated by severe dengue as much as 51%. The results of the analysis showed a very strong and meaningful correlation between the clinical degree of DHF with ALT levels ( $p\text{-value} = 0.000$ ;  $r = 0.927$ ) and AST levels ( $p\text{-value} = 0.000$ ;  $r = 0,906$ ).

**Conclusion:** There is a significant relationship and a very strong correlation between the clinical degree of DHF and ALT and AST activities in pediatric patients treated at Dr. H. Abdul Moloek Hospital. Examination of liver enzyme levels can be an important indicator in assessing the clinical severity of DHF.

**Keywords:** ALT, AST, Children, Clinical Degree, Dengue Fever