

INTISARI

Latar belakang: Hepatitis B kronik masih merupakan penyakit infeksi yang menjadi masalah utama di Asia. Keberhasilan terapi antivirus terhadap infeksi hepatitis B telah banyak didukung oleh pemeriksaan laboratorium yang sangat sensitif untuk memantau HBV-DNA. Peningkatan kadar enzim transaminase (ALT dan AST) merupakan penanda serum yang umum digunakan sebagai indikator kerusakan sel hepar.

Tujuan: Mengetahui hubungan antara *viral load* HBV-DNA dan enzim transaminase (ALT dan AST) pada pasien hepatitis B.

Metode: Penelitian observasional dengan data sekunder kadar HBV-DNA, ALT dan AST bulan Januari – November 2020 pada pasien hepatitis B di RSUP Dr. Sardjito. Analisis data dasar secara deskriptif, ditampilkan dalam median (minimal–maksimal). Uji korelasi menggunakan Spearman dengan $p < 0,05$ bermakna secara statistik. Data kategorikal disajikan dalam proporsi.

Hasil: Subjek penelitian ini sebanyak 153 pasien hepatitis B. Median usia subjek 50 tahun (termuda 19 tahun, tertua 75 tahun). Proporsi subjek laki-laki lebih banyak daripada perempuan [87 (62,59%) dan 52 (37,41%)]. Median kadar HBV-DNA adalah 4,40 log IU/mL (0,84-9,00). Median kadar ALT dan AST berturut-turut adalah 42,0 (6,0 – 1041,0) U/L dan 45,0 (13,0 – 1058,0) U/L. Analisis korelasi didapatkan adanya hubungan yang lemah namun bermakna secara statistik antara HBV-DNA dan ALT ($r=0,368$; $p \leq 0,01$) serta HBV-DNA dan AST ($r=0,311$; $p \leq 0,01$).

Simpulan: Terdapat hubungan positif yang lemah namun bermakna secara statistik antara kadar *viral load* HBV-DNA dan enzim transaminase (ALT dan AST) pada pasien hepatitis B.

Kata Kunci: *Hepatitis B, HBV-DNA, ALT, AST*

ABSTRACT

Background: Chronic hepatitis B is still an infectious disease which is a major problem in Asia. The success of antiviral therapy against hepatitis B infection has been widely supported by very sensitive laboratory tests to monitor HBV-DNA. Increased levels of the transaminase enzyme are commonly used as an indicator of liver cell damage.

Objective: Analysis of the relationship between HBV-DNA viral load and transaminase enzymes (ALT and AST) in hepatitis B patients.

Method: Observational research with secondary data on HBV-DNA, ALT and AST levels from January to November 2020 in hepatitis B patients at Dr. Sardjito hospital. Descriptive baseline data analysis, presented in median (minimum – maximum). Correlation test using Spearman with $p < 0.05$ was statistically significant. Categorical data are presented in proportions.

Result: The study subjects were 153 hepatitis B patients. The median age of the subjects was 50 years (the youngest was 19 years old, the oldest was 75 years). The proportion of male subjects was higher than female [87 (62.59%) and 52 (37.41%)]. The median HBV-DNA level was 4.40 log IU / mL (0.84-9.00). The median ALT and AST levels were 42.0 (6.0 - 1041.0) U / L and 45.0 (13.0 - 1058.0) U / L, respectively. Correlation analysis showed a weak but statistically significant relationship between HBV-DNA and ALT ($r = 0.368$; $p < 0.01$) and HBV-DNA and AST ($r = 0.311$; $p < 0.01$).

Conclusion: There was a weak but statistically significant positive relationship between HBV-DNA viral load and transaminase enzyme (AST and ALT) levels in hepatitis B patients.

Keywords: *Hepatitis B, HBV-DNA, ALT, AST*