

**POLITEKNIK KESEHATAN TANJUNGKARANG
JURUSAN TEKNOLOGI LABORATORIUM MEDIS
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Skripsi, Oktober 2024

Intan Permata Sari

**KORELASI KADAR ALT DAN AST TERHADAP *VIRAL LOAD*
HBV DNA PADA DARAH DONOR DI UDD PEMBINA PMI
PROVINSI LAMPUNG**

xvii + 27 halaman, 4 tabel, 6 gambar, dan 13 lampiran

ABSTRAK

Hepatitis B penyakit merupakan infeksi disebabkan oleh virus Hepatitis B yang ditandai adanya inflamasi pada hati. Hati adalah salah satu organ tubuh yang mengandung enzim transaminase yaitu ALT dan AST. Apabila hati mengalami peradangan dan nekrosis yang disebabkan alkohol, obat-obatan, infeksi virus, enzim ini terlepas dan masuk ke peredaran darah yang menyebabkan tingginya kadar enzim ALT dan AST di dalam darah. Pemeriksaan HBV DNA juga memprediksi hasil jangka panjang, pengobatan, dan menilai respons terhadap terapi antivirus, banyaknya HBV DNA dalam darah mengindikasikan banyak virus yang diproduksi di hepar. Tingkat kuantitatif HBV DNA, ALT, dan hasil histologi merupakan komponen utama dalam pengelolaan dan pengobatan. Tujuan penelitian ini untuk mengetahui korelasi kadar ALT dan AST terhadap *viral load* HBV DNA pada darah donor. Jenis penelitian ini yaitu bersifat analitik dengan desain penelitian *cross sectional*. Variabel bebas penelitian ini yaitu kadar ALT dan AST dan variabel terikat adalah *viral load* HBV DNA. Data diolah menggunakan uji *Korelasi Spearman* untuk melihat hasil kadar ALT dan AST yang dikorelasi dengan *viral load* HBV DNA diperoleh *p-value* 0,0191 dan *p-value* 0,0937. Maka dapat disimpulkan ada hubungan antara kadar ALT terhadap *viral load* HBV DNA dan tidak ada hubungan antara kadar AST terhadap *viral load* HBV DNA.

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

Daftar Bacaan : 27 (2005-2023)

**TANJUNGKARANG MINISTRY OF HEALTH POLYTECHNIC
DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
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Intan Permata Sari

**CORRELATION OF ALT AND AST LEVELS WITH HBV DNA
VIRAL LOAD IN BLOOD DONORS AT UDD PEMBINA PMI
LAMPUNG PROVINCE**

xvii + 27 pages, 4 tables, 6 figures, and 13 attachments

ABSTRACT

Hepatitis B disease is an infection caused by the Hepatitis B virus characterized by inflammation of the liver. The liver is one of the body organs that contains transaminase enzymes, namely ALT and AST. If the liver experiences inflammation and necrosis caused by alcohol, drugs, viral infections, these enzymes are released and enter the bloodstream, causing high levels of ALT and AST enzymes in the blood. HBV DNA examination also predicts long-term outcomes, treatment, and assesses response to antiviral therapy. The amount of HBV DNA in the blood indicates that a lot of virus is produced in the liver. Quantitative levels of HBV DNA, ALT, and histology results are key components in management and treatment. The aim of this study was to determine the correlation between ALT and AST levels and HBV DNA viral load in donor blood. This type of research is analytical with a cross sectional research design. The independent variables of this study were ALT and AST levels and the dependent variable was HBV DNA viral load. The data was processed using the Spearman Correlation test to see the results of ALT and AST levels which were correlated with the HBV DNA viral load, obtaining a p-value of 0.0191 and a p-value of 0.0937. So it can be concluded that there is a relationship between ALT levels and HBV DNA viral load and there is no relationship between AST levels and HBV DNA viral load.

Keywords : Hepatitis B, HBV DNA, ALT, AST

Reading List : 27 (2005-2023)