

HUBUNGAN KADAR FOSFOLIPASE A₂ SEKRETORIK TIPE IIA DENGAN *MEAN PLATELET VOLUME* PADA PASIEN DIABETES MELITUS TIPE 2 DI RSJ PROF. DR. SOEROJO MAGELANG 2016

Woro Ayu Sekararum

Abstrak

Prevalensi mortalitas penderita diabetes melitus (DM) dengan komplikasi terus meningkat, sehingga komplikasi angiopati harus terus dipantau. Enzim sekretorik fosfolipase A₂ tipe IIA (sPLA₂ tipe IIA) merupakan enzim mediator lipid penghubung patogenesis DM dengan komplikasi angiopati diabetes. Aktivitas trombosit berperan dalam terjadinya angiopati diabetes dengan *mean platelet volume* (MPV) sebagai penanda aktivitas trombosit. Penelitian ini dilakukan untuk mengetahui hubungan antara kadar sPLA₂ tipe IIA dengan MPV. Penelitian ini menggunakan desain *cross-sectional* pada 63 subjek penelitian dengan teknik *total sampling* di RSJ Prof. Dr. Soerojo Magelang. Instrumen yang digunakan adalah rekam medis. Subjek penelitian diambil dari pasien DM yang tidak mengalami penyakit infeksi, inflamasi akut, trauma, pembedahan atau keganasan, menderita anemia, mengonsumsi obat antiplatelet, memiliki kadar jumlah platelet abnormal dan merokok. Hasil penelitian menunjukkan median kadar sPLA₂ tipe IIA sebesar 3841,50 ng/dL dan rata-rata nilai MPV sebesar 7,36 fl. Hasil analisis korelasi Spearman didapatkan korelasi lemah antara sPLA₂ tipe IIA dengan MPV ($p = 0,551$), tetapi terdapat kecenderungan peningkatan sPLA₂ tipe IIA diikuti dengan peningkatan nilai MPV ($r = 0,077$). Terdapat perbedaan rata-rata nilai MPV pada subjek penelitian dengan lama DM ≤ 10 tahun dan > 10 tahun ($p = 0,009$).

Kata Kunci: Enzim sPLA₂ tipe IIA, Diabetes Melitus Tipe II, *Mean Platelet Volume*.

**THE RELATIONSHIP BETWEEN SECRETORY
PHOSPHOLIPASE A₂ TYPE IIA LEVELS AND MEAN
PLATELET VOLUME IN TYPE 2 DIABETES MELLITUS
PATIENTS IN RSJ PROF. DR. SOEROJO MAGELANG 2016**

Woro Ayu Sekararum

Abstract

The mortality rate of diabetes mellitus (DM) patients with complication continues to increase, thus diabetic angiopathy must be continuously monitored. Phospholipase/sPLA type IIA enzyme is a lipid mediating enzyme that connects the pathogenesis DM with complications of diabetic angiopathy. Platelet activity plays a role in the occurrence of diabetic angiopathy with mean platelet volume (MPV) as a marker of platelet activity. This study was conducted to determine the relationship between type IIA sPLA₂ levels and MPV. This study uses a cross-sectional method in 63 subjects taken with total sampling at RSJ Prof. Dr. Soerojo Magelang. The instrument used is a medical record. Subjects were DM patients who did not have infectious diseases, acute inflammation, trauma, surgery or malignancy, anemia, administered antiplatelet drugs, abnormal platelet count and smoke. The results showed that the median of sPLA₂ type IIA level was 3841,50ng/dL and the mean of MPV value was 7,36fl. The results of the Spearman correlation analysis showed a weak correlation between sPLA₂ type IIA and MPV ($p=0.551$) with a tendency in an increase in sPLA₂ type IIA followed by an increase in MPV value. There were differences in MPV mean values between diabetics with ≤ 10 years and > 10 years duration of diabetes ($p=0.009$).

Keywords: Diabetes Mellitus Type II, Mean Platelet Volume, sPLA₂ type IIA Enzyme.