

ABSTRAK

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KORELASI KADAR D-DIMER DENGAN KOLESTEROL TOTAL PADA
PENDERITA DIABETES MELITUS TIPE 2 DI RUMAH SAKIT UMUM
DAERAH HAJI PROVINSI JAWA TIMUR

xv + 75 halaman + 11 tabel + 9 lampiran.

Diabetes Melitus Tipe 2 memicu komplikasi vaskular sistemik melalui hiperkoagulabilitas diukur melalui pemeriksaan D-dimer dan dislipidemia diukur melalui pemeriksaan kolesterol total. Kombinasi ini meningkatkan risiko mikrotrombi dan aterosklerosis. Tujuan penelitian menganalisis hubungan antara kadar D-dimer dengan kolesterol total pada penderita diabetes melitus tipe 2 di RSUD Haji Provinsi Jawa Timur. Desain yang digunakan yaitu analitik korelasi dengan teknik *purposive sampling* pada 25 pasien diabetes melitus tipe 2 rawat jalan. Kadar D-dimer plasma dianalisis menggunakan metode immunoturbidimetri (*Roche Cobas c311*), sedangkan kolesterol total serum diuji menggunakan metode enzimatis kolorimetri (*Cobas c303*). Uji statistik menggunakan *Spearman's rho*. Karakteristik responden dengan jumlah perempuan 15 orang (60%) dan laki-laki 10 orang (40%), didominasi usia pra-lansia. Sebanyak 32% responden mengalami peningkatan kadar D-dimer ($>0,50 \mu\text{g/mL FEU}$) dan 48% mengalami dislipidemia. Didapatkan hasil koefisien korelasi (r) sebesar 0,076 pada uji *Spearman's rho* yang nilai signifikansi $p = 0,717 (p > 0,05)$. Kesimpulan penelitian yaitu secara statistik tidak terdapat korelasi signifikan dari kadar D-dimer dengan kolesterol total pada penderita diabetes melitus tipe 2. Jalur patofisiologi dislipidemia dan hiperkoagulabilitas berjalan secara independen, serta dipengaruhi oleh kepatuhan konsumsi obat-obatan farmakologis (antidiabetes, statin, atau antiplatelet) oleh pasien rawat jalan tersebut.

Kata Kunci : Diabetes Melitus Tipe 2, D-dimer, Kolesterol Total, Komplikasi Vaskular.

Daftar Bacaan : 53 jurnal (2017-2025) dan 12 buku (2019-2024).

ABSTRACT

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CORRELATION OF D-DIMER LEVELS WITH TOTAL CHOLESTEROL IN TYPE 2 DIABETES MELLITUS PATIENTS AT THE HAJI REGIONAL GENERAL HOSPITAL, EAST JAVA PROVINCE

xv + 75 pages + 11 tables + 9 appendices.

Type 2 diabetes mellitus triggers systemic vascular complications through hypercoagulability measured by D-dimer examination and dyslipidemia measured by total cholesterol examination. This combination increases the risk of microthrombi and atherosclerosis. This study aims to analyze the correlation between D-dimer levels and total cholesterol in patients with type 2 diabetes mellitus at Haji Regional General Hospital, East Java Province. This study design was correlation analytic with purposive sampling technique on 25 outpatients with type 2 diabetes mellitus. Plasma D-dimer levels were analyzed using the immunoturbidimetric method (Roche Cobas c311), while serum total cholesterol was tested using the enzymatic colorimetric method (Cobas c303). Statistical tests used Spearman's rho. The characteristics of respondents consisted of 15 women (60%) and 10 men (40%), and predominantly pre-elderly. A total of 32% of respondents had elevated D-dimer levels ($>0.50 \mu\text{g/mL FEU}$) and 48% had dyslipidemia. Spearman's rho test produced a correlation coefficient (r) of 0.076 with a significance value of $p = 0.717$ ($p > 0.05$). The conclusion of the study showed that there was no statistically significant correlation between D-dimer levels and total cholesterol in patients with type 2 diabetes mellitus. The pathophysiological pathways of dyslipidemia and hypercoagulability run independently, and are influenced by compliance with the consumption of pharmacological drugs (antidiabetic, statin, or antiplatelet) by these outpatients.

Keywords: Type 2 Diabetes Mellitus, D-dimer, Total Cholesterol, Vascular Complications.

Reading List: 53 journals (2017–2025) 12 books (2019–2024).