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**HUBUNGAN KADAR HbA1c DENGAN KADAR SGPT SGOT PADA
PENDERITA DIABETES MELITUS TIPE 2 DI RSD Dr. A DADI
TJOKRODIPO BANDAR LAMPUNG**

xvii + 33 halaman, 2 gambar, 9 tabel, 19 lampiran

ABSTRAK

Diabetes Mellitus Tipe 2 (DMT2) adalah penyakit metabolik kronis yang ditandai oleh hiperglikemia akibat resistensi insulin atau gangguan sekresi insulin, yang dapat menyebabkan komplikasi, termasuk kerusakan hati. Penelitian ini bertujuan untuk menganalisis hubungan antara kadar HbA1c, sebagai indikator kontrol glikemik jangka panjang, dengan kadar enzim hati SGOT dan SGPT pada penderita DMT2. Jenis penelitian adalah analitik dengan desain *cross-sectional*, dilaksanakan di RSD dr. A. Dadi Tjokrodipo Bandar Lampung pada Juni 2025, dengan sampel 35 pasien DMT2 yang memenuhi kriteria inklusi dan eksklusi melalui teknik *accidental* sampling. Variabel bebas adalah kadar HbA1c, sedangkan variabel terikat adalah kadar SGOT dan SGPT. Analisis data dilakukan secara univariat dan bivariat menggunakan uji *Spearman Rank*, karena data SGOT dan SGPT tidak terdistribusi normal. Dari 35 responden, 54.3% adalah perempuan dan 45.7% laki-laki, dengan rata-rata kadar HbA1c 9.1%, menunjukkan kontrol glikemik yang buruk. Rata-rata kadar SGOT dan SGPT masing-masing adalah 25.74 U/L dan 22.94 U/L, meskipun dalam batas normal, nilai tertinggi menunjukkan potensi kerusakan hati. Hasil uji *Spearman Rank* menunjukkan hasil hubungan HbA1c dengan SGOT ($p\text{-value } 0.833 > 0,05$, koefisien korelasi $-0,037$) dan HbA1c dengan SGPT adalah ($p\text{-value } 0.299 > 0,05$, koefisien korelasi $0,181$), keduanya menunjukkan hubungan yang sangat lemah dan tidak signifikan, sehingga hipotesis nol diterima.

Kata Kunci : Diabetes Mellitus Tipe 2, HbA1c, SGOT, SGPT
Daftar bacaan : (2013-2024)

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**THE RELATIONSHIP BETWEEN HbA1c LEVEL AND SGPT SGOT LEVEL
IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AT RSD Dr. A DADI
TJOKRODIPO BANDAR LAMPUNG**

xvii + 33 page, 2 figure, 9 tables, 19 appendice

ABSTRACT

Type 2 Diabetes Mellitus (T2DM) is a chronic metabolic disease characterized by hyperglycemia resulting from insulin resistance or impaired insulin secretion, which can lead to complications, including liver damage. This study aims to analyze the relationship between HbA1c levels, as an indicator of long-term glycemic control, and liver enzyme levels (SGOT and SGPT) in patients with T2DM. This research is an analytical study with a cross-sectional design, conducted at RSD dr. A. Dadi Tjokrodipo Bandar Lampung in June 2025, involving a sample of 35 T2DM patients who met the inclusion and exclusion criteria through accidental sampling. The independent variable is the HbA1c level, while the dependent variables are the SGOT and SGPT levels. Data analysis was carried out using univariate and bivariate methods with the Spearman Rank test, as the SGOT and SGPT data were not normally distributed. Of the 35 respondents, 54.3% were female and 45.7% male, with an average HbA1c level of 9.1%, indicating poor glycemic control. The average SGOT and SGPT levels were 25.74 U/L and 22.94 U/L, respectively. Although within normal limits, the highest values indicate a potential for liver damage. The Spearman Rank test results showed the relationship between HbA1c and SGOT ($p\text{-value } 0.833 > 0.05$, correlation coefficient -0.037) and between HbA1c and SGPT ($p\text{-value } 0.299 > 0.05$, correlation coefficient 0.181), both of which indicate a very weak and non-significant relationship. Therefore, the null hypothesis is accepted.

Keywords : Type 2 Diabetes Mellitus, HbA1c, SGOT, SGPT
Reading list :(2013-2024)