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Hubungan Kadar Glukosa Darah Puasa dengan Proteinuria pada Pasien Diabetes Melitus di Rumah Sakit Bintang Amin

xvi + 30 halaman, 2 gambar, 10 tabel, 19 lampiran

ABSTRAK

Diabetes Melitus (DM) merupakan penyakit metabolik kronis yang ditandai dengan hiperglikemia akibat gangguan sekresi atau kerja insulin. Hiperglikemia berkepanjangan dapat menimbulkan komplikasi mikrovaskular seperti nefropati diabetik, yang ditandai dengan munculnya protein dalam urin (proteinuria). Penelitian ini bertujuan mengetahui hubungan kadar glukosa darah puasa dengan proteinuria pada pasien DM di RS Bintang Amin. Desain penelitian ini adalah *cross sectional* dengan sampel 34 pasien yang dipilih melalui teknik *purposive sampling*. Data diperoleh dari hasil pemeriksaan glukosa darah puasa dan protein urine. Rata-rata kadar glukosa darah puasa adalah 160,94 mg/dL, dengan nilai tertinggi 300 mg/dL dan terendah 84 mg/dL. Hasil pemeriksaan protein urine menunjukkan (50%) pasien negatif, (26,5%) +1, (14,7%) +2, dan (8,8%) +3. Uji korelasi *Rank Spearman* menunjukkan hubungan signifikan antara kadar glukosa darah puasa dengan proteinuria ($p = 0,025$) dengan kekuatan korelasi sedang ($r = 0,383$). Kesimpulannya, semakin tinggi kadar glukosa darah puasa, semakin besar kemungkinan pasien mengalami proteinuria. Temuan ini mendukung pentingnya pemantauan glukosa darah puasa sebagai deteksi dini risiko komplikasi ginjal pada penderita Diabetes Melitus.

Kata Kunci: Diabetes Melitus, Glukosa Darah Puasa, Nefropati Diabetik, Proteinuria
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The Relationship Between Fasting Blood Glucose Levels and Proteinuria in Diabetic Patients at Bintang Amin Hospital

xvi + 30 pages, 3 pictures, 10 tabels, 19 appendices

ABSTRACT

Diabetes Mellitus (DM) is a chronic metabolic disease characterized by hyperglycemia due to defects in insulin secretion or action. Prolonged hyperglycemia can result in microvascular complications such as diabetic nephropathy, marked by the presence of protein in urine (proteinuria). This study aims to determine the relationship between fasting blood glucose levels and proteinuria in DM patients at RS Bintang Amin. The study design is cross-sectional with a sample of 34 patients selected through purposive sampling technique. Data was obtained from fasting blood glucose tests and urine protein tests. The average fasting blood glucose level is 160.94 mg/dL, with the highest value being 300 mg/dL and the lowest 84 mg/dL. The urine protein test results show that (50%) of patients are negative, (26.5%) +1, (14.7%) +2, and (8.8%) +3. The Spearman Rank correlation test shows a significant relationship between fasting blood glucose levels and proteinuria ($p = 0.025$) with a moderate correlation strength ($r = 0.383$). In conclusion, the higher the fasting blood glucose level, the greater the likelihood of patients experiencing proteinuria. These findings support the importance of monitoring fasting blood glucose as an early detection of the risk of kidney complications in patients with Diabetes Mellitus.

Keywords: *Diabetes Mellitus, Fasting Blood Glucose, Diabetic Nephropathy, Proteinuria*

Reading List: *30 (2012-2025)*