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Korelasi Kadar Vitamin D Serum dengan Fungsi Ginjal pada Pasien Glomerulonefritis di RSUP DR. Sardjito
Satria Adi Putera, dr. Yulia Wardhani, Sp.P.D., Subsp. G.H. (K).; Dr. dr. Metalia Puspitasari, M. Sc., Sp.P.D., Subsp.
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ABSTRAK

KORELASI KADAR VITAMIN D SERUM DENGAN FUNGSI GINJAL PADA PASIEN GLOMERULONEFRITIS DI RSUP DR. SARDJITO

Satria Adi Putera[1], Yulia Wardhani[2], Metalia Puspitasari[2]
[1]PPDS Ilmu Penyakit Dalam FKKMK UGM
[2]Divisi Ginjal dan Hipertensi, Departemen Ilmu Penyakit Dalam FKKMK UGM

Latar Belakang: Defisiensi vitamin D sering ditemukan pada penyakit ginjal dan diduga berperan pada proses inflamasi serta progresivitas kerusakan ginjal pada glomerulonefritis.
Metode: Studi observasional analitik dengan desain potong lintang pada pasien glomerulonefritis di RSUP Dr. Sardjito Yogyakarta. Kadar 25(OH)D serum (ng/mL) dinilai bersamaan dengan fungsi ginjal menggunakan estimasi laju filtrasi glomerulus (eLFG, mL/menit/1,73 m²). Analisis hubungan dilakukan dengan korelasi Spearman serta regresi linear berganda setelah mengendalikan usia, jenis kelamin, merokok, obesitas, hipertensi, diabetes melitus, dan komorbid.
Hasil: Sebanyak 60 subjek dianalisis. Rerata kadar 25(OH)D serum adalah 13,54 ± 10,48 ng/mL dan rerata eLFG 95,26 ± 37,61 mL/menit/1,73 m². Mayoritas subjek mengalami defisiensi vitamin D (88,33%). Korelasi Spearman menunjukkan tidak terdapat hubungan bermakna antara kadar vitamin D dan eLFG (r = 0,027; p = 0,840). Pada analisis multivariat, kadar vitamin D tetap tidak berhubungan dengan eLFG setelah penyesuaian faktor perancu (p = 0,531).
Kesimpulan: Defisiensi vitamin D sangat tinggi pada pasien glomerulonefritis, namun kadar vitamin D serum tidak berhubungan dengan fungsi ginjal berdasarkan eLFG pada populasi Glomerulonefritis dalam penelitian ini.

Kata kunci: vitamin D; 25(OH)D; glomerulonefritis; eLFG; fungsi ginjal.

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ABSTRACT

THE CORRELATION BETWEEN SERUM VITAMIN D LEVEL AND RENAL FUNCTION IN GLOMERULONEPHRITIS PATIENTS AT RSUP DR. SARDJITO

Satria Adi Putera[1], Yulia Wardhani[2], Metalia Puspitasari[2]
[1]Department of Internal Medicine, FKKMK UGM
[2]Division of Nephrology and Hypertension, Department of Internal Medicine FKKMK UGM

Background: Vitamin D deficiency is frequently observed in kidney disease and is thought to contribute to inflammation and progression of renal injury in glomerulonephritis.
Methods: An analytic observational cross-sectional study was conducted in patients with glomerulonephritis at Dr. Sardjito General Hospital, Yogyakarta. Serum 25(OH)D level (ng/mL) and kidney function were assessed using estimated glomerular filtration rate (eGFR, mL/min/1.73 m²). Associations were evaluated using Spearman correlation and multiple linear regression adjusted for age, sex, smoking, obesity, hypertension, diabetes mellitus, and comorbidities.
Results: A total of 60 subjects were analyzed. The mean serum 25(OH)D level was 13.54 ± 10.48 ng/mL and the mean eGFR was 95.26 ± 37.61 mL/min/1.73 m². Most subjects had vitamin D deficiency (88.33%). Spearman correlation analysis showed no significant association between vitamin D level and eGFR ($r = 0.027$; $p = 0.840$). In multivariable analysis, vitamin D level remained not associated with eGFR after adjustment ($p = 0.531$).
Conclusion: Vitamin D deficiency was highly prevalent among patients with glomerulonephritis, but serum vitamin D level was not associated with kidney function based on eGFR in this study population.

Keywords: vitamin D; 25(OH)D; glomerulonephritis; eGFR; kidney function.