

ABSTRACT

THE RELATIONSHIP BETWEEN SERUM URIC ACID LEVELS AND THE SEVERITY OF CHRONIC KIDNEY DISEASE AMONG PATIENTS AT DR. H. ABDUL MOELOEK GENERAL HOSPITAL IN 2024

By

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Background: Chronic kidney disease (CKD) is a progressive condition that causes a decline in kidney function, including impaired uric acid excretion. Elevated uric acid levels in the blood (hyperuricemia) are commonly found in CKD patients and are thought to accelerate kidney damage. However, information regarding the relationship between uric acid levels and the severity of CKD in non-hemodialysis patients at Dr. H. Abdul Moeloek General Hospital is still limited.

Methods: This study used an analytical observational design with a cross-sectional approach. Data were collected secondarily from the medical records of 92 non-hemodialysis CKD patients in 2024. The comparison of uric acid levels between CKD stages was analyzed using the Kruskal-Wallis test, while the relationship between serum uric acid levels and CKD severity was assessed using Spearman's correlation test.

Results: The mean serum uric acid level in patients was 8.075 mg/dL, and nearly half of the patients were in stage 4 (45.7%). The Kruskal-Wallis test showed a significant difference in uric acid levels between stages ($p < 0.001$). Spearman's correlation analysis showed a strong and significant positive relationship between serum uric acid levels and the severity of CKD ($r = 0.0636$; $p < 0.001$).

Conclusion: There is a significant and strong relationship between serum uric acid levels and the severity of CKD in non-hemodialysis patients. Higher uric acid levels are associated with more severe CKD.

Keywords: Uric acid, severity, hyperuricemia, non-hemodialysis, chronic kidney disease.

ABSTRAK

HUBUNGAN ANTARA KADAR ASAM URAT SERUM DENGAN DERAJAT KEPARAHAN PENYAKIT GINJAL KRONIS PADA PASIEN DI RSUD DR. H. ABDUL MOELOEK TAHUN 2024

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Latar Belakang: Penyakit Ginjal Kronis (PGK) adalah kondisi yang berlangsung progresif dan menyebabkan penurunan fungsi ginjal, termasuk gangguan pembuangan asam urat. Kenaikan kadar asam urat dalam darah (hiperurisemia) sering dijumpai pada pasien PGK dan diduga berperan dalam mempercepat kerusakan ginjal. Meski demikian, informasi mengenai kaitan kadar asam urat dengan derajat keparahan PGK pada pasien non-hemodialisis di RSUD Dr. H. Abdul Moeloek masih terbatas.

Metode: Penelitian ini menggunakan desain observasional analitik dengan pendekatan cross-sectional. Data diambil secara sekunder dari rekam medis 92 pasien PGK non-hemodialisis tahun 2024. Perbandingan kadar asam urat antar stadium PGK dianalisis menggunakan uji Kruskal-Wallis, sedangkan hubungan antara kadar asam urat serum dan tingkat keparahan PGK dinilai dengan uji korelasi Spearman.

Hasil: Rata-rata kadar asam urat serum pada pasien sebesar 8,075 mg/dL, dan hampir separuh pasien berada pada stadium 4 (45,7%). Uji Kruskal-Wallis menunjukkan perbedaan kadar asam urat yang signifikan antar stadium ($p < 0,001$). Analisis korelasi Spearman memperlihatkan hubungan positif yang kuat dan bermakna antar kadar asam urat serum dan derajat keparahan PGK ($r = 0,0636$; $p < 0,001$).

Simpulan: Terdapat hubungan yang bermakna dan kuat antara kadar asam urat serum dengan derajat keparahan PGK pada pasien non-hemodialisis. Kadar asam urat yang lebih tinggi berkaitan dengan kondisi PGK yang lebih berat.

Kata kunci: Asam urat, derajat keparahan, hiperurisemia, non-hemodialisis, penyakit ginjal kronis.