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**Perbedaan Kadar Kreatinin Dan Ureum Pada Penderita Gagal Ginjal
Kronik Sebelum Dan Sesudah Hemodialisa**

xii + 25 halaman, 5 tabel, 2 gambar, dan 8 lampiran

ABSTRAK

Gagal Ginjal Kronik (GGK) merupakan kondisi kerusakan fungsi ginjal progresif yang mengakibatkan penumpukan sisa metabolisme toksik seperti ureum dan kreatinin. Hemodialisa menjadi terapi pengganti ginjal untuk membersihkan darah dari zat-zat tersebut. Efektivitas hemodialisa dapat diukur melalui penurunan kadar ureum dan kreatinin. Penelitian dilaksanakan di Rumah Sakit Pertamina Bintang Amin, Bandar Lampung, pada Mei-Juni 2025. Sampel penelitian terdiri dari 30 pasien GGK stadium 5 yang memenuhi kriteria inklusi yang menjalani hemodialisa rawat jalan. Pengumpulan data dilakukan secara primer melalui pemeriksaan kadar kreatinin (metode *Jaffe Reaction*) dan ureum (metode *Berthelot*) dari sampel darah vena sebelum dan sesudah sesi hemodialisa. Analisis data dilakukan secara univariat untuk melihat distribusi data, Analisis bivariat menggunakan uji normalitas *Shapiro-Wilk* yang dilanjutkan dengan uji *t-berpasangan* untuk membandingkan kadar sebelum dan sesudah terapi. Dari 30 responden, rata-rata usia penderita GGK adalah 52 tahun. Hasil analisis rata-rata kadar kreatinin sebelum hemodialisa 9,25 mg/dL dan menurun menjadi 3,13 mg/dL sesudah hemodialisa. Rata-rata kadar ureum sebelum hemodialisa 100,95 mg/dL dan menurun tajam menjadi 33,41 mg/dL sesudah hemodialisa. Hasil uji *t-berpasangan* untuk kreatinin dan ureum menunjukkan nilai $p\text{-value} = 0,000$ ($p < 0,05$), yang mengkonfirmasi adanya perbedaan yang sangat signifikan secara statistik antara sebelum dan sesudah perlakuan hemodialisa.

Kata kunci : Gagal Ginjal Kronik, Hemodialisa, Kreatinin, Ureum.

Daftar Bacaan : 16 (2004-2023)

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Differences in Creatinine and Urea Levels in Chronic Kidney Disease Patients Before and After Hemodialysis

+ 25 Pages + 5 Tables + 2 Picture + 8 Attachment

ABSTRACT

Chronic Kidney Disease (CKD) is a condition of progressive kidney function damage that results in the accumulation of toxic metabolic waste, such as urea and creatinine. Hemodialysis serves as a renal replacement therapy to cleanse the blood of these substances. The effectiveness of hemodialysis can be measured by the reduction in urea and creatinine levels. The study was conducted at Pertamina Bintang Amin Hospital, Bandar Lampung, from May to June 2025. The research sample consisted of 30 stage 5 CKD patients who met the inclusion criteria and were undergoing outpatient hemodialysis. Primary data was collected through the examination of creatinine (Jaffe Reaction method) and urea (Berthelot method) levels from venous blood samples taken before and after the hemodialysis session. Data analysis was performed univariately to observe data distribution, while bivariate analysis used the Shapiro-Wilk normality test followed by a paired t-test to compare levels before and after therapy. Out of the 30 respondents, the mean age of CKD patients was 52 years. The analysis the mean creatinine level before hemodialysis was 9.25 mg/dL, decreasing to 3.13 mg/dL after hemodialysis. The mean urea level was 100.95 mg/dL before hemodialysis and dropped sharply to 33.41 mg/dL afterward. The paired t-test results for creatinine and urea showed a p-value of 0.000 ($p < 0.05$), confirming a statistically highly significant difference between pre- and post-hemodialysis treatment..

Keywords : Chronic Kidney Failure, Hemodislysis, Creatinine, Urea.
Reading List : 16 (2006-2023)