

PERBANDINGAN KADAR UREUM DAN KREATININ PASIEN GAGAL GINJAL PRA DAN PASCA HEMODIALISA DI SALAH SATU RUMAH SAKIT SWASTA DAERAH JATI ASIH

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ABSTRAK

Gagal ginjal kronis merupakan penyakit yang disebabkan karena penurunan fungsi ginjal karena ginjal tidak dapat mengekskresikan sisa metabolisme tubuh. Prevalensi penyakit ginjal kronis di Indonesia berdasarkan data Riset Kesehatan Dasar (Riskesdas) tahun 2018 tercatat sebanyak 499.800 orang (0,38%). Terapi hemodialisa dilakukan untuk pengganti fungsi ginjal yang rusak dalam melakukan ekskresi sisa metabolisme tubuh. Efektifitas terapi hemodialisa dilihat dari penurunan kadar ureum dan kreatinin pasca hemodialisa. Tujuan penelitian ini untuk melihat nilai minimal, maksimal dan rata-rata kadar ureum dan kreatinin saat pra dan pasca hemodialisa, membandingkan kadar ureum dan kreatinin pasien gagal ginjal pra dan pasca hemodialisa. Metode penelitian menggunakan analisis komparatif dengan desain penelitian *Cross-sectional* dan teknik sampling *purposive sampling*. Total data penelitian melibatkan 160 data rekam medis pasien gagal ginjal kronis yang menjalani hemodialisa dan melakukan pemeriksaan ureum dan kreatinin. Analisis data menggunakan software SPSS V.25 dengan uji statistik T-Test Paired. Hasil pemeriksaan ureum pasca hemodialisa mengalami penurunan sebanyak 70,10% dengan rata-rata kadar ureum 31,10 mg/dL dibandingkan pra hemodialisa. Kadar kreatinin pasca hemodialisa mengalami penurunan sebanyak 62,00% dengan rata-rata kadar kreatinin 2,13 mg/dL dibandingkan pra hemodialisa. Hasil uji statistik Paired T-Test didapatkan nilai *p value* 0,000 ($<0,05$), yang menunjukkan adanya perbedaan yang signifikan terhadap kadar ureum dan kreatinin pra dan pasca hemodialisa. Saran untuk penelitian selanjutnya adalah penelitian menggunakan sampel dalam jumlah yang besar serta menambahkan parameter pemeriksaan uji GFR dengan melakukan pemeriksaan klirens ureum dan klirens kreatinin untuk menentukan tingkat kerusakan ginjal serta melakukan pemeriksaan URR untuk mengetahui adekuasi hemodialisis yang dicapai.

Kata kunci: Gagal ginjal kronik, ureum, kreatinin, hemodialisa.

COMPARISON OF UREUM AND CREATININE LEVELS IN PRE AND POST RENAL FAILURE PATIENTS IN HEMODIALIZATION AT ONE OF THE REGIONAL HOSPITAL OF JATI ASIH

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ABSTRACT

Chronic kidney failure is a disease caused by a decrease in kidney function because the kidneys cannot excrete the rest of the body's metabolism. The prevalence of chronic kidney disease in Indonesia based on data from the Basic Health Research (Riskesdas) in 2018 was recorded at 499,800 people (0.38%). Hemodialysis therapy is performed to replace the damaged kidney function in excreting the rest of the body's metabolism. The effectiveness of hemodialysis therapy is seen from the decrease in urea and creatinine levels after hemodialysis. The purpose of this study was to see the minimum, maximum and average values of urea and creatinine levels during pre and post hemodialysis, to compare the levels of urea and creatinine in renal failure patients before and after hemodialysis. The research method uses comparative analysis with cross-sectional research design and purposive sampling technique. The total research data involved 160 medical records of patients with chronic kidney failure who underwent hemodialysis and examined urea and creatinine. Data analysis using SPSS V.25 software with T-Test Paired statistical test. The results of post-hemodialysis urea examination decreased by 70.10% with an average urea level of 31.10 mg/dL compared to pre-hemodialysis. Post-hemodialysis creatinine levels decreased by 62.00% with an average creatinine level of 2.13 mg/dL compared to pre-hemodialysis. The results of the Paired T-Test statistical test showed a p value of 0.000 (<0.05), which indicated a significant difference in urea and creatinine levels before and after hemodialysis. Suggestions for further research are research using large samples and adding parameters to the GFR test by checking urea and creatinine clearance to determine the level of kidney damage and performing URR examination to determine the hemodialysis adequacy achieved.

Keywords: Chronic renal failure, urea, creatinine, hemodialysis.