

ABSTRAK

Latar belakang: Hemodialisa merupakan *treatment* yang dilakukan pada penderita gagal ginjal kronik dengan cara memindahkan zat terlarut dalam darah dan air menuju ke cairan yang sudah diketahui komponennya secara difusi dan ultrafiltrasi. Peningkatan kadar kreatinin, ureum, asam urat, serta elektrolit dapat diturunkan dengan hemodialisa. Tujuan dari hemodialisa sendiri pada dasarnya untuk menggantikan fungsi ginjal mengekskresikan zat-zat yang bersifat racun bagi tubuh karena terakumulasi dalam darah dan memperbaiki keseimbangan cairan tubuh.

Tujuan penelitian: Mengetahui perbedaan kadar elektrolit pada pasien dengan penyakit ginjal kronis stadium 5 pre-hemodialisis dan post-hemodialisis, di Rumah Sakit Panti Rapihdan mengetahui jenis elektrolit (K) yang perubahan kadarnya paling signifikan.

Metode Penelitian: Metode penelitian yang dipakai adalah dengan eksperimental kuasi model one group before and after intervention design atau one group pre and post test design. Jumlah sampel yang dipakai pada penelitian ini sebanyak 42 orang yang diambil dengan cara quota sampling. Spesimen darah diambil dari pasien penyakit ginjal kronis stadium 5 sebelum dan sesudah hemodialisis. Data elektrolit diolah dengan uji statistik Wilcoxon menggunakan program SPSS 17.0 for Windows. Signifikansi yang digunakan adalah $p < 0,05$.

Hasil Penelitian: Penurunan kadar kalium post hemodialisis pada penelian ini sesuai dengan penelitian sebelumnya, yaitu terjadi penurunan kadar kalium yang signifikan setelah dilakukan hemodialisis rata-rata sebesar 26,1%. Sampel dengan kadar kalium pre hemodialisis yang masuk dalam nilai normal setelah hemodialisis menjadi kurang dari nilai normal sebanyak 27 sampel atau 64%. Sampel dengan kadar kalium pre hemodialisis yang lebih tinggi dari normal dan menjadi normal setelah hemodialisis sebanyak 7 sampel (16,1%). Sampel dengan kadar kalium pre hemodialisis yang normal dan setelah hemodialisis tetap normal sebanyak 8 sampel (19%). Hasil penelitian didapatkan nilai $p = 0,000$ ($p < 0,005$).

Simpulan Penelitian: Hasil penelitian menunjukkan bahwa terdapat perbedaan yang signifikan pada kadar kaliumnya sebelum dan sesudah hemodialisis, yaitu penurunan kadar kalium ($p < 0,05$).

Kata kunci: Penyakit ginjal kronis, hemodialisis, kalium

ABSTRACT

Background: Hemodialysis is a treatment carried out in patients with chronic kidney failure by transferring dissolved substances in the blood and water to the liquid whose components are known to be diffusion and ultrafiltration. Increased levels of creatinine, urea, gout, and electrolytes can be reduced by hemodialysis. The purpose of hemodialysis itself is basically to replace kidney function excreting substances that are toxic to the body because it accumulates in the blood and improves body fluid balance.

Objective: To determine the difference in electrolyte levels in patients with stage 5 chronic kidney disease pre-hemodialysis and post-hemodialysis, at the Panti Rapih Hospital and find out the type of electrolyte (K) whose changes are the most significant.

Research Methods: The research method used was experimental quasi one model before and after intervention design or one group pre and post test design. The number of samples used in this study were 42 people taken by means of quota sampling. Blood specimens taken from patients with disease stage 5 chronic kidney before and after hemodialysis. Electrolyte data is processed with the Wilcoxon statistical test using the SPSS 17.0 for Windows program. The significance used is $p < 0.05$.

Results: Decrease in post hemodialysis potassium levels in this study was in accordance with previous studies, namely a significant decrease in potassium levels after an average hemodialysis of 26.1%. Samples with pre hemodialysis potassium levels that entered normal values after hemodialysis became less than the normal value of 27 samples or 64%. Samples with pre hemodialysis potassium levels that were higher than normal and became normal after hemodialysis were 7 samples (16.1%). Samples with normal pre hemodialysis potassium levels after hemodialysis remained normal as many as 8 samples (19%). The results of the study obtained $p = 0,000$ ($p < 0,005$).

Conclusion: Research results show that there are differences Significant on the potassium levels before and after hemodialysis, which is a decrease potassium levels ($p < 0.05$).

Keywords: Chronic Kidney Disease, Hemodialysis, Potassium