

HUBUNGAN LAJU FILTRASI GLOMERULUS (LFG) TERHADAP INTENSITAS HEMODIALISA PADA PASIEN GAGAL GINJAL DI SALAH SATU RUMAH SAKIT X WILAYAH CIKARANG PERIODE 2021

BINTANG RUMONDANG SIANTURI
NIM.202003002

Abstrak

Pendahuluan: Gagal ginjal kronik merupakan proses patofisiologi dari tahap akhir perjalanan penyakit ginjal kronik (PGK) sehingga menyebabkan penurunan fungsi ginjal yang bersifat tetap. Keadaan ini membutuhkan pengobatan untuk menggantikan kerja ginjal meliputi hemodialisa. Intensitas hemodialisa mempengaruhi kadar kreatinin pada pasien yang baru menjalani hemodialisa kurang dari 1 tahun. Ciri-ciri penyakit gagal ginjal biasanya terjadi saat lebih dari 3 bulan yang ditandai dengan atau tanpa penurunan laju filtrasi glomerulus (LFG). LFG merupakan salah satu indikator terbaik untuk menggambarkan kondisi fungsi ginjal. Penelitian ini bertujuan untuk mengetahui hubungan LFG terhadap intensitas hemodialisa pada pasien gagal ginjal di salah satu rumah sakit X wilayah Cikarang periode 2021.

Metode: Jenis penelitian yang dilakukan adalah kuantitatif komparatif dengan pendekatan *Cross-sectional*. Pengambilan sampel menggunakan teknik *purposive sampling*. Sampel pada penelitian ini melibatkan 12 pasien gagal ginjal yang menjalani hemodialisa. Analisis data dilakukan dengan analisis asosiatif menggunakan uji *Spearman Rank* ($p < 0,05$).

Hasil: Hasil penelitian ini diperoleh jumlah pasien hemodialisa didominasi oleh perempuan (83%), usia termuda 32 tahun, terbanyak 32 tahun, tertua 53 tahun, dengan rerata usia 40 tahun. Berat badan terkecil 43 kg, terbanyak 56 kg, terbesar 75 kg, dengan rerata berat badan 56 kg. Intensitas hemodialisa dalam setahun terbanyak yaitu 1x hemodialisa (26%). Rerata kadar kreatinin serum post hemodialisa pada laki-laki 17,3 mg/dL (17%) dan rerata perempuan 8,9 mg/dL (83%). Pada uji normalitas shapiro-wilk diperoleh $p \text{ value} < 0,05$. Data dianalisis dengan *Spearman Rank* diperoleh hubungan antara LFG dengan kadar kreatinin serum post hemodialisa, LFG dengan usia dan LFG dengan berat badan, tidak terdapat hubungan antara LFG dan intensitas hemodialisa serta kadar kreatinin serum dengan intensitas hemodialisa karena $p \text{ value} > 0,05$.

Kesimpulan: H_0 diterima artinya tidak terdapat hubungan antara LFG terhadap intensitas hemodialisa dan H_0 ditolak artinya terdapat hubungan antara LFG dengan kadar kreatinin serum post hemodialisa.

Kata Kunci: Gagal Ginjal, Hemodialisa, Laju Filtrasi Glomerulus

THE RELATIONSHIP BETWEEN GLOMERULAR FILTRATION RATE (GFR) AND HEMODIALYSIS INTENSITY IN RENAL FAILURE PATIENTS AT HOSPITAL X IN THE CIKARANG REGION 2021

BINTANG RUMONDANG SIANTURI
NIM.202003002

Abstract

Introduction: Chronic kidney failure is a pathophysiological process of the end-stage of chronic kidney disease (CKD), resulting in a permanent decline in kidney function. This condition requires treatment to replace kidney function, such as hemodialysis. The intensity of hemodialysis affects the level of creatinine in patients who have undergone hemodialysis for less than 1 year. The characteristics of kidney failure typically occur for more than 3 months and are characterized by a decrease in the glomerular filtration rate (GFR) with or without symptoms. GFR is one of the best indicators to describe kidney function. This study aims to determine the relationship between GFR and the intensity of hemodialysis in patients with kidney failure at Hospital X in the Cikarang region during the 2021 period.

Method: This study is a comparative quantitative research with a cross-sectional approach. The sampling technique used was purposive sampling. The sample in this study involved 12 kidney failure patients undergoing hemodialysis. Data analysis was performed using associative analysis using the Spearman Rank test ($p < 0.05$).

Results: The results of this study showed that the majority of hemodialysis patients were female (83%), with the youngest being 32 years old and the oldest being 53 years old, with an average age of 40 years. The smallest body weight was 43 kg, the highest was 75 kg, with an average weight of 56 kg. The most common intensity of hemodialysis in a year was 1x hemodialysis (26%). The mean post-hemodialysis serum creatinine level in males was 17.3 mg/dL (17%), and in females, it was 8.9 mg/dL (83%). The Shapiro-Wilk normality test yielded a p -value < 0.05 . Data were analyzed using the Spearman Rank test, which showed a correlation between GFR and post-hemodialysis serum creatinine level, GFR and age, and GFR and body weight. There was no correlation between GFR and HD intensity or serum creatinine level and hemodialysis intensity because the p -value was > 0.05 .

Conclusion: H_0 accepted means that there is no relationship between LFG and the intensity of hemodialysis, while H_0 rejected means that there is a relationship between LFG and the post-hemodialysis serum creatinine levels.

Key words : Kidney failure, Hemodialysis, Glomerular Filtration Rate