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Korelasi Kadar Albumin dan *C-Reactive Protein* pada Pasien Penyakit Ginjal Kronis yang Menjalani Terapi Hemodialisa di RS Pertamina Bintang Amin

xvii + 32 halaman, 8 tabel, 6 gambar, dan 14 lampiran

ABSTRAK

Penyakit ginjal kronis (PGK) merupakan salah satu dari penyakit tidak menular yang membahayakan. Apabila laju filtrasi glomerulus (LFG) <15 ml/menit dilakukan tindakan terapi hemodialisa. Tindakan terapi hemodialisa dan keluarnya protein albumin melewati organ ekskresi ginjal pada pasien PGK menyebabkan kadar albumin dalam darah menjadi rendah. Albumin memiliki fungsi salah satunya bertindak sebagai antioksidan yang menetralkan radikal bebas penyebab kerusakan jaringan. Radikal bebas terbentuk dari inflamasi sistemik pasien PGK, ketidakseimbangan antioksidan dalam menetralkan radikal bebas menyebabkan lebih banyak inflamasi dan meningkatnya kadar CRP. Tujuan penelitian ini adalah untuk mengetahui korelasi antara kadar albumin dan CRP pada pasien PGK yang menjalani terapi hemodialisa. Jenis penelitian adalah analitik desain *cross sectional*. Jumlah populasi sebanyak 105 pasien PGK yang menjalani terapi hemodialisa, sampel penelitian yang sesuai kriteria berjumlah 31 pasien. Penelitian ini dilakukan di RS Pertamina Bintang Amin Bandar Lampung pada bulan Maret-Mei 2024. Variabel bebas adalah kadar albumin dan variabel terikat adalah kadar CRP. Hasil penelitian didapatkan kadar albumin terendah 2,85 g/dL tertinggi 5,15 g/dL dan kadar CRP terendah 6 mg/L tertinggi 96 mg/L. Hasil uji korelasi *spearman* didapatkan korelasi negatif dengan kekuatan hubungan yang sedang. *P-value* = 0,005, $r = -0.489$. Semakin rendah kadar albumin maka kadar CRP akan semakin meningkat.

Kata Kunci : PGK hemodialisa, albumin, CRP
Daftar Bacaan : 37 (2003-2024)

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Correlation of Albumin and *C-Reactive Protein* Levels in Chronic Kidney Disease Patients Undergoing Hemodialysis Therapy at Pertamina Bintang Amin Hospital

xvii + 32 pages, 8 tables, 6 images, and 14 attachments

ABSTRACT

Chronic kidney disease (CKD) is one of the most dangerous non-communicable diseases. If the glomerulus filtration rate (LFG) is <15 ml/min hemodialysis therapy is performed. The action of hemodialysis therapy and the release of albumin protein through the kidney excretion organs in CKD patients causes low blood albumin levels. Albumin has a function one of which acts as an antioxidant that neutralizes free radicals that cause tissue damage. Free radicals are formed from systemic inflammation in CKD patients, an imbalance of antioxidants in neutralizing free radicals causes more inflammation and increased CRP levels. The purpose of this study was to determine the correlation between albumin and CRP levels in CKD patients undergoing hemodialysis therapy. The type of research is analytic cross sectional design. The total population was 105 CKD patients undergoing hemodialysis therapy, the research sample that fit the criteria amounted to 31 patients. This research was conducted at Pertamina Bintang Amin Hospital Bandar Lampung in March-May 2024. The independent variable is albumin level and the dependent variable is CRP level. The results showed that the lowest albumin level was 2.85 g/dL the highest was 5.15 g/dL and the lowest CRP level was 6 mg/L the highest was 96 mg/L. Spearman correlation test results obtained a negative correlation with moderate relationship strength. P-value 0.005, r 0.489. The lower albumin level CRP levels will increase.

Keywords : CKD hemodialysis, albumin, CRP
Reading List : 37 (2003-2024)