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Hubungan Kadar Transferrin Dengan Jumlah Eritrosit Pada Pasien Gagal Ginjal Kronik di Rumah Sakit Bintang Amin

xvi + 33 halaman, 2 gambar, 7 tabel, dan 15 lampiran

ABSTRAK

Gagal ginjal kronik merupakan kondisi penurunan fungsi ginjal yang progresif dan ireversibel. Penurunan fungsi ginjal disebabkan oleh gangguan pada tahap pre renal, renal, dan post renal. Kondisi ini mempengaruhi nefron, sehingga ginjal kehilangan kemampuan untuk melakukan proses penyaringan disebabkan kerusakan nefron. Anemia merupakan komplikasi umum yang dapat terjadi ketika kerja ginjal menurun menjadi 20-50% dari fungsi ginjal normal. Anemia akibat terganggunya produksi eritropoietin. Transferrin adalah glikoprotein yang berperan dalam pengangkutan zat besi untuk proses eritropoiesis. Tujuan penelitian ini mengetahui hubungan kadar transferrin dengan jumlah eritrosit pada pasien gagal ginjal kronik di Rumah Sakit Bintang Amin. Jenis penelitian ini observasional analitik dengan desain *cross sectional*. Penelitian dilakukan di Rumah Sakit Bintang Amin dan Laboratorium Imunoserologi Poltekkes Kemenkes Tanjungpur pada bulan April-Juni 2025. Jumlah populasi sebanyak 105 pasien gagal ginjal kronik dan didapatkan sebanyak 32 sampel yang memenuhi kriteria. Data dianalisis menggunakan uji *Spearman*. Hasil penelitian didapatkan kadar transferrin terendah 1,5 mg/ml tertinggi 8 mg/ml dan jumlah eritrosit terendah 2,6 juta/ul dan tertinggi 4,0 juta/ul. Hasil uji korelasi *Spearman* menunjukkan tidak terdapat hubungan yang signifikan antara kadar transferrin dengan jumlah eritrosit ($p = 0,730$; $r = -0,063$).

Kata Kunci : Anemia, eritrosit, gagal ginjal kronik, transferrin.

Daftar Bacaan : 46 (2004-2024)

**TANJUNGKARANG HEALTH POLYTECHNIC
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Relationship Between Transferrin Levels and Erythrocyte Count in Chronic Kidney Failure Patients at Bintang Amin Hospital

xvi + 33 pages, 2 pictures , 7 tables , and 15 attachment

ABSTRACT

Chronic renal failure is a condition of progressive and irreversible decline in kidney function. Decreased kidney function is caused by disorders in the pre-renal, renal, and post-renal stages. This condition affects the nephrons, so that the kidneys lose their ability to carry out the filtering process due to damage to the nephrons. Anemia is a common complication that can occur when kidney function decreases to 20-50% of normal kidney function. Anemia due to impaired erythropoietin production. Transferrin is a glycoprotein that plays a role in transporting iron for the erythropoiesis process. The purpose of this study was to determine the relationship between transferrin levels and the number of erythrocytes in patients with chronic kidney failure at Bintang Amin Hospital. This type of research is observational analytic with a cross-sectional design. The study was conducted at Bintang Amin Hospital and the Immunoserology Laboratory of the Ministry of Health Polytechnic of Tanjungkarang in April-June 2025. The population was 105 patients with chronic kidney failure and 32 samples were obtained that met the criteria. Data were analyzed using the Spearman test. The results of the study obtained the lowest transferrin level of 1.5 mg/ml, the highest 8 mg/ml and the lowest erythrocyte count of 2.6 million/ul and the highest 4.0 million/ul. The results of the Spearman correlation test showed no significant relationship between transferrin levels and erythrocyte count ($p = 0.730$; $r = -0.063$).

Keyword : Anemia, chronic kidney failure, erythrocytes transferrin.

Reading List : 46 (2004-2024)