

ABSTRAK

Latar belakang: Persatuan Nefrologi Indonesia menyebutkan ada lebih dari 30 ribu penderita penyakit ginjal kronis di tahun 2015 yang memerlukan hemodialisis. Lama hemodialisis dapat menurunkan kadar hemoglobin dan jumlah eritrosit, serta meningkatkan kadar ferritin.

Tujuan: Penelitian ini bertujuan untuk mengetahui pengaruh lama hemodialisis terhadap kadar ferritin, hemoglobin dan jumlah eritrosit pada penderita penyakit ginjal kronis.

Metode: Metode penelitian ini adalah observasional analitik dengan rancangan potong lintang. Subjek penelitian yang digunakan dalam penelitian sebanyak 30 orang dengan jenis kelamin laki-laki yang telah memenuhi kriteria inklusi kemudian dibagi menjadi 3 kelompok: 1, 3 dan 6 bulan.

Hasil: Analisis Post Hoc LSD menyebutkan bahwa ferritin pada 3 bulan (rerata $7,18 \pm 63,61$ ng/mL) dan 6 bulan (rerata $947 \pm 66,22$ ng/mL) lebih tinggi secara bermakna dibanding 1 bulan, $p = 0,001$. Kadar ferritin 6 bulan lebih tinggi dibanding 3 bulan, $p = 0,001$. Kadar hemoglobin rerata $8,97 \pm 1,09$ gr/dl, sedangkan jumlah eritrosit rerata $3,13 \pm 0,48$ ($\times 10^6$ sel/ mm^3). Kadar hemoglobin dan jumlah eritrosit tidak bermakna dengan nilai $p = 0,270$ untuk hemoglobin dan $p = 0,094$ untuk eritrosit.

Kesimpulan: Kadar ferritin pada hemodialisis selama 6 bulan, lebih tinggi dibanding hemodialisis 1 dan 3 bulan, sedangkan kadar hemoglobin dan jumlah eritrosit tidak terdapat perbedaan yang bermakna.

Kata kunci : Lama hemodialisis, ferritin, eritrosit, hemoglobin

ABSTRACT

Background: *Indonesia is one of the countries with high rates of kidney disease, according to data of Perneftri (Persatuan Nefrologia Indonesia) in 2015, more than 30,000 people with chronic kidney disease (PGK). The distribution of the disease not only affects adults but in children and adolescents under 25 years reaches 2.39%. Hemodialysis is one of the therapy in patients (CKD) with the aim of removing the rest of the metabolism so it is not toxic that can increase mortality for patients. Ferritin is an iron reserve in the body and can be reused when erythropoiesis needs increase. The higher the ferritin means the more iron deposits in the body and the lower the erythropoiesis that occurs, causing anemia.*

Purpose: *This study aims to determine the relationship of long hemodialysis to increase levels of ferritin and decrease the amount of erythrocytes and hemoglobin levels in patients with chronic kidney disease with duration of 1.3 and 6 months of therapy.*

Methods: *The research method used is descriptive analytic corelative, with case-control study of chronic kidney disease patients who perform routine hemodialysis therapy in RSUD Kraton Kabupaten Pekalongan.*

Results: *Of 30 patients, 10% had normal ferritin levels and 90% with high ferritin levels. 100% of patients had low hemoglobin levels and there were 3.33% of patients with normal erythrocyte counts and 96.67% had low erythrocyte counts.*

Conclusion: *So it can be concluded that in patients with stage 5 chronic kidney disease with hemodialysis therapy 1, 3 and 6 months increased ferritin levels but the amount of erythrocytes and hemoglobin levels will decrease.*

Keywords: *Long therapy of hemodialysis, Ferritin, erythrocytes and hemoglobin*