

HUBUNGAN KADAR SERUM IRON (Fe) DENGAN *TOTAL IRON BINDING CAPACITY* PADA PENDERITA GAGAL GINJAL KRONIK YANG MENJALANI HEMODIALISA

Sinta Permata Dewi¹, Herlisa Anggraini², Budi Santosa²

1. Mahasiswa D III Analis Kesehatan Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang.
2. Dosen Program Studi D-III Analis Kesehatan Fakultas ilmu Keperawatan dan Kesehatan Universitas Muhamadiyah Semarang.

ABSTRAK

Gagal ginjal kronik merupakan perkembangan gagal ginjal progresif dan lambat dimana ginjal kehilangan kemampuan untuk mempertahankan volume dan komposisi cairan tubuh dengan nilai *glomerular filtration rate* (GFR) 25% - 10% dari nilai normal. Penatalaksanaan gagal ginjal adalah dengan hemodialisa. Hemodialisa akan meningkatkan resiko terjadinya anemia, sehingga proses ini diduga mempengaruhi Fe serum dan *total iron binding capacity* (TIBC) dalam darah. Tujuan penelitian ini untuk mengetahui hubungan kadar serum iron dan *total iron binding capacity* pada penderita gagal ginjal kronik yang menjalani hemodialisa. Jenis penelitian adalah analitik, teknik sampling total populasi, dengan jumlah sampel 34 pasien pasien gagal ginjal kronik yang menjalani hemodialisa yang melakukan pemeriksaan Serum Iron (Fe) dan TIBC di Laboratorium Sarana Medika Boyolali selama bulan April 2018. Hasil penelitian menunjukkan bahwa serum iron (Fe) responden mayoritas normal yaitu 28 responden (82,4%). Hasil pemeriksaan total iron binding capacity responden mayoritas normal yaitu 24 responden (70,6%). Hasil analisis diperoleh *p-value* ($0,029 < 0,05$) nilai $r = 0,374$. Maka dapat disimpulkan bahwa terdapat hubungan kadar serum iron dengan *total iron binding capacity* pada penderita gagal ginjal kronik saat proses hemodialisa dengan kekuatan hubungan lemah. Penelitian dapat disimpulkan bahwa ada hubungan kadar serum iron dengan *total iron binding capacity* pada penderita gagal ginjal kronik yang menjalani hemodialisa

Kata Kunci : kadar serum iron, *total iron binding capacity*, Penderita GJK, hemodialisa

RELATIONSHIP OF SERUM IRON LEVELS (FE) WITH A TOTAL IRON BINDING CAPACITY IN PATIENTS CHRONIC KIDNEY DISEASE WHEN HEMODIALYSIS PROCESSES

Sinta Permata Dewi¹, Herlisa Anggraini², Budi Santosa²

1. Three years Diploma of Health Analyst Study Program, Nursing and Health Faculty, Muhamaduyah University of Semarang
2. Lecturer Program Analyst Study of Health Faculty of Nursing and Health, Muhamaduyah University of Semarang

ABSTRACT

Chronic renal failure is the development of progressive and slow renal failure where the kidneys lose the ability to maintain volume and composition of body fluids with a glomerular filtration rate (GFR) of 25% - 10% of normal values. Management of kidney failure is by hemodialysis. Hemodialis will increase the risk of anemia, so this process is thought to cause serum Fe and total iron binding capacity (TIBC) in the blood. The purpose of this study was to determine the relationship between serum iron levels and total iron binding capacity in patients with chronic renal failure undergoing hemodialysis. This type of research is analytical. Total population sampling technique, with a sample of 34 patients with chronic renal failure patients undergoing hemodialysis who examined Serum Iron (Fe) and TIBC in the Boyolali Medica Laboratory during April 2018. The results showed that serum iron (Fe) normal majority respondents are 28 respondents (82.4%). The results of the examination of the total iron binding capacity of the majority respondents are 24 respondents (70.6%). The results of the analysis obtained p -value, $(0.029 < 0.05)$ $r = 0.374$. It can be concluded that there is a correlation between serum iron levels and total iron binding capacity in patients with chronic renal failure during hemodialysis with weak relationship strength. The research can be concluded that there is a correlation between serum iron levels and total iron binding capacity in patients with chronic renal failure during the hemodialysis process

Keywords: serum iron levels, total iron binding capacity, Chronic Kidney Disease, hemodialysis