

ABSTRAK

Latar Belakang: Pemeriksaan TIBC (*Total Iron Binding Capacity*) digunakan untuk mengukur jumlah total besi yang dapat terikat oleh protein transferrin. Pemeriksaan TIBC sebaiknya segera dikerjakan, tetapi apabila terpaksa ditunda sebaiknya disimpan dalam lemari es dengan suhu $2^{\circ}\text{--}8^{\circ}$. Fakta di lapangan menunjukkan bahwa dokter masih sering meminta parameter tambahan setelah beberapa jam pengiriman sampel ke laboratorium, salah satunya parameter kimia darah pada pasien yang sedang melakukan hemodialisa.

Tujuan Penelitian: Mengetahui ada tidaknya perbedaan kadar TIBC pada serum pasien gagal ginjal kronik yang diperiksa segera dan disimpan selama 7 hari pada suhu 2° C sampai 8° C .

Metode Penelitian: Jenis penelitian ini termasuk penelitian pra eksperimen (*pra experiment design*). Penelitian ini dilakukan pada 20 pasien gagal ginjal kronik. Sampel darah diambil kemudian dipisahkan dan diambil serumnya. Setelah itu dilakukan pemeriksaan TIBC segera dan disimpan selama 7 hari pada suhu 2° C sampai 8° C . Analisis data menggunakan uji *Wilcoxon* dengan tingkat signifikansi $\alpha=0,05$.

Hasil Penelitian: Data penelitian yang diperoleh kemudian dianalisis secara deskriptif dan statistik. Data yang telah dialalisis secara deskriptif kemudian dilanjutkan dengan analisis statistik dengan SPSS 27 yang meliputi uji normalitas data dan uji beda. Berdasarkan uji normalitas diperoleh hasil data tidak berdistribusi normal (nilai *sig* < 0,05). Sehingga uji beda menggunakan Uji *Wilcoxon* nilai *sig* (*Asymp. Sig*) sebesar 0,006.

Kesimpulan: Ada perbedaan kadar TIBC pada serum pasien gagal ginjal kronik yang diperiksa segera dan disimpan selama 7 hari pada suhu $2^{\circ}\text{--}8^{\circ}\text{ C}$.

Kata Kunci: TIBC, Gagal Ginjal Kronik, Serum Segera Diperiksa, Serum Disimpan 7 hari.

ABSTRACT

Background: TIBC (*Total Iron Binding Capacity*) examination is used to measure the total amount of iron that can be bound by transferrin protein. TIBC examination should be done immediately, but if it has to be postponed, it should be stored in a refrigerator at a temperature of 20-80. Facts in the field show that doctors still often ask for additional parameters after several hours of sending samples to the laboratory, one of which is blood chemistry parameters in patients undergoing hemodialysis.

Research Objective: To determine whether there is a difference in TIBC levels in the serum of chronic kidney failure patients who are examined immediately and stored for 7 days at a temperature of 20 C to 80 C.

Research Method: This type of research is a pre-experimental study (pre-experimental design). This study was conducted on 20 chronic kidney failure patients. Blood samples were taken, then separated and the serum was taken. After that, TIBC examination was carried out immediately and stored for 7 days at a temperature of 20 C to 80 C. Data analysis used the Wilcoxon test with a significance level of $\alpha = 0.05$.

Research Results: The research data obtained were then analyzed descriptively and statistically. The data that had been analyzed descriptively was then continued with statistical analysis with SPSS 27 which included data normality tests and difference tests. Based on the normality test, the data results were not normally distributed sig value < 0.05 . So the difference test used the Wilcoxon Test sig value (*Asymp. Sig*) 0,006.

Conclusion: There was a difference in TIBC levels in the serum of chronic kidney failure patients that were examined immediately and stored for 7 days at a temperature of 20-80 C.

Keywords: TIBC, Chronic Kidney Failure, Serum is Checked Immediately, Serum is Stored for 7 Days.