

Perbedaan Kadar Total Protein Berdasarkan Waktu Pembendungan

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ABSTRAK

Pemeriksaan laboratorium diklasifikasikan menjadi tiga tahapan yaitu pra analitik, analitik, dan pasca analitik. Kesalahan yang dilakukan tahap pra analitik yaitu kesalahan penggunaan *tourniquet*. CLSI (2013) merekomendasikan waktu penggunaan *tourniquet* maksimal satu menit dengan tekanan 40 mmHg, apabila lebih dari satu menit dengan tekanan keras menyebabkan aliran darah lokal dihentikan sehingga terjadi hemokonsentrasi yang mempengaruhi pemeriksaan makromolekul seperti protein. Tujuan penelitian untuk mengetahui perbedaan total protein berdasarkan waktu pembendungan. Jenis penelitian yang digunakan adalah eksperimen. Sampel diambil secara acak sebanyak 16 mahasiswa dari semester V D-III Analisis Kesehatan Universitas Muhammadiyah Semarang, kemudian dilakukan pengambilan darah vena dengan pembendungan segera dan ditunda 2 menit. Hasil pemeriksaan menunjukkan rata-rata hasil total protein dengan pembendungan segera 8,556 g/dL dan yang ditunda 2 menit 9,081 g/dL. Hal ini menunjukkan bahwa hasil total protein berdasarkan waktu pembendungan segera dan ditunda 2 menit didapatkan perbedaan selisih sebesar 0,525. Uji statistik Independent Sample t test menunjukkan nilai kemaknaan 0,000 sehingga disimpulkan ada perbedaan hasil kadar total protein berdasarkan waktu pembendungan.

Kata Kunci : kadar total protein, waktu pembendungan

Differences in Total Protein Based Content Time of Damage

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ABSTRACT

Laboratory examinations are classified into three stages: pre-analytic, analytic, and post-analytic. Errors made in the pre-analytic stage are errors in the use of a tourniquet. CLSI (2013) recommends a tourniquet time of up to one minute at a pressure of 40 mmHg, if more than one minute with hard pressure causes local blood flow to be stopped so hemoconcentration occurs which affects the examination of macromolecules such as proteins. The aim of the study was to determine the difference in total protein based on the time of containment. The type of research used is experiment. Samples were taken randomly as many as 16 students from semester V D-III Health Analyst at the University of Muhammadiyah Semarang, then performed venous blood collection with immediate containment and delayed 2 minutes. The results of the examination showed an average total protein yield with immediate containment of 8.556 g/dl and delayed 2 minutes 9.081 g/dl. This shows that the results of total protein based on the immediate containment time and 2 minutes delay were found to be a difference of 0.525. Independent Sample t test statistical test shows a significance value of 0,000 so it can be concluded that there is a difference in the results of total protein levels based on the time of containment.

Key words: total protein content, time of containment