

Perbedaan Kadar Bilirubin Total Plasma EDTA Terpapar Cahaya Dan Tanpa Cahaya

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ABSTRAK

Pemeriksaan bilirubin total merupakan salah satu pemeriksaan laboratorium untuk tes fungsi hati. Hasil pemeriksaan bilirubin total dapat berpengaruh terhadap faktor dalam dan faktor luar. Faktor luar yang dapat berpengaruh terhadap hasil pemeriksaan bilirubin total adalah sinar matahari atau cahaya lampu yang dapat menyebabkan penurunan kadar bilirubin. Tujuan penelitian untuk mengetahui perbedaan hasil pemeriksaan bilirubin total plasma EDTA terpapar cahaya dan tanpa cahaya. Jenis penelitian adalah eksperimen dengan pendekatan *cross sectional*. Sampel diambil secara acak sebanyak 32 mahasiswa dari total populasi 41 mahasiswa semester VIII DIV Analis Kesehatan Kelas F Universitas Muhammadiyah Semarang, kemudian sampel diperiksa dengan dua perlakuan menggunakan *semiauto chemistry analyzer*. Hasil pemeriksaan menunjukkan rata – rata hasil pemeriksaan bilirubin total plasma EDTA terpapar cahaya 0,54 mg/dL, sedangkan pemeriksaan bilirubin total plasma EDTA tanpa cahaya 0,48 mg/dL dengan selisih 0,06 mg/dL. Uji statistik Mann-Whitney menunjukkan nilai kemaknaan sebesar 0,162 dengan taraf kemaknaan 0,05. Sehingga dapat disimpulkan bahwa tidak ada perbedaan antara pemeriksaan kadar bilirubin total terpapar cahaya dan tanpa cahaya.

Kata kunci : Bilirubin total, Plasma EDTA, Pengaruh cahaya

The Difference of Plasma Total Bilirubin Levels EDTA Exposure to Light and Without Light

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ABSTRAC

Examination of total bilirubin is one of the laboratory tests for liver function tests. Total bilirubin examination results can affect internal factors and external factors. External factors that can affect the results of total bilirubin examination are sunlight or light that can cause a decrease in bilirubin levels. The aim of this research to determine differences in the results of the examination of EDTA plasma total bilirubin exposure to light and without light. This research is an experimental study with cross-sectional approach. Samples were taken at random sampling as many as 32 students from total population is 41 students at F Class, 8th semesters on DIV Program Health Analyst in University of Muhammadiyah Semarang, and then the sample was examined with two treatments using a *semiauto chemistry analyzer* (MINDRAY BA 88 A). The results of the examination of EDTA plasma bilirubin total with light exposure is 0.54 mg/dL and the examination of EDTA plasma bilirubin total without light is 0.48 mg/dL with a difference of 0.06 mg / dL. Mann-Whitney test showed a significance value of 0,162 with the significance level of 0,05. Thus, it can be concluded that there is no significant different between of plasma total bilirubin levels EDTA to light and without light.

Keywords: Total Bilirubin, EDTA Plasma, Effect of Light