

Perbedaan Kadar Alkali Fosfatase Serum dan Plasma Heparin

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ABSTRAK

Pemeriksaan alkali fosfatase dapat menggunakan spesimen berupa serum dan plasma heparin. Pemeriksaan alkali fosfatase sering menggunakan spesimen serum, namun plasma heparin memiliki waktu penyediaan (*Turn Around Time*) lebih cepat dibandingkan serum, sehingga dapat meningkatkan efisiensi waktu pemeriksaan. Tujuan penelitian untuk mengetahui perbedaan kadar alkali fosfatase serum dan plasma heparin. Jenis penelitian adalah penelitian analitik dengan pendekatan *cross sectional*. Sampel diambil secara *random* sebanyak 21 mahasiswa dari total populasi 41 mahasiswa kelas F DIV Analis Kesehatan Universitas Muhammadiyah Semarang. Hasil pemeriksaan menunjukkan rata-rata kadar alkali fosfatase serum sebesar 143,62 U/L, sedangkan rata-rata kadar alkali fosfatase plasma heparin sebesar 137,48 U/L. Hal ini menunjukkan kadar alkali fosfatase serum lebih tinggi dibandingkan plasma heparin, namun keduanya masih berada dalam batas nilai normal. Uji statistik *Independent-Samples T Test* menunjukkan nilai kemaknaan 0,442 dengan taraf kemaknaan 0,05 yaitu $0,442 \geq 0,05$ sehingga dapat disimpulkan bahwa tidak ada perbedaan kadar alkali fosfatase serum dan plasma heparin.

Kata kunci: serum, plasma heparin, alkali fosfatase

Differences Between Serum and Heparin Plasma in Alkaline Phosphatase Levels

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ABSTRACT

Alkaline phosphatase examination may use specimens of serum and heparin plasma. Serum specimens is often used, but heparin plasma has a shorter turn around time than serum. So, the use of heparin plasma can improve the efficiency of the examination time. This analytical research with cross sectional approach was conducted to determine the result differences between serum and heparin plasma in alkaline phosphatase levels. There were 21 samples which were randomly taken from the total population of 41 students of the F class of Health Analyst Academy of Muhammadiyah University of Semarang. The results showed that the serum alkaline phosphatase levels average was 143,62 U/L, while the heparin plasma alkaline phosphatase levels average was 137,48 U/L. These results indicated that the serum alkaline phosphatase levels are higher than heparin plasma. However, both results are still within the normal range. The statistical test of *Independent-Samples T Test* showed a significance value of 0,442 with the significance level of 0,05 that $0,442 \geq 0,05$. Thus, it can be concluded that there is no significant difference between serum and heparin plasma in alkaline phosphatase levels.

Key words: serum, heparin plasma, alkaline phosphatase