

INTISARI

Retno Susilaningih¹, dr. M.I. Diah Pramudianti, Sp.PK (K).,M.Sc², dr. Ratna Herawati³. 2017. Perbandingan Kadar Alkali Fosfatase (ALP) Serum Sebelum dan Sesudah Waktu Tunda 4 dan 8 Hari pada Suhu Kamar. Program Studi D-IV Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi¹, Instalasi Patologi Klinik RSDM², Dosen Universitas Setia Budi Surakarta³.

Alkali fosfatase (ALP) merupakan enzim yang mengatur metabolisme yang didapatkan pada saluran empedu, hati, usus, ginjal dan kelenjar susu. Pemeriksaan ALP terkadang tidak segera dikerjakan karena berbagai sebab, sehingga sampel harus disimpan. Penyimpanan serum ALP stabil pada suhu kamar (20-25°C) selama 7 hari. Tujuan penelitian untuk mengetahui perbedaan kadar ALP serum sebelum dan sesudah waktu tunda 4 dan 8 hari pada suhu kamar.

Penelitian ini bersifat observasional analitik dengan jumlah sampel 31 orang. Penelitian dilakukan di Instalasi Patologi Klinik Rumah sakit Umum dr. Moewardi di Surakarta pada bulan April 2017. Pemeriksaan ALP dengan metode IFCC. Data dianalisis menggunakan uji *Friedman* dilanjutkan uji *Wilcoxon* dengan nilai $p < 0,05$ (bermakna) dan interval kepercayaan 95 %, diperkuat metode *Bland-Altman*.

Jumlah pria 14, wanita 17, *mean* umur $53,10 \pm 15,89$, *Median* (min-maks) kadar ALP hari 0, 4, 8 yaitu 73 (42-419), 75 (40-372), 79 (36-423). Perbedaan kadar ALP serum antara 0 dan 4 hari, 0 dan 8 hari, 4 dan 8 hari yaitu $p=0,922$; $p=0,372$; $p=0,256$.

Hasil penelitian tidak terdapat perbedaan kadar ALP serum sebelum dan sesudah waktu tunda 4 dan 8 hari pada suhu kamar. Perlu penelitian lanjutan pada suhu kamar lebih 8 hari, ataupun dengan suhu kulkas.

Kata Kunci : Kadar Alkali Fosfatase serum, Waktu tunda 0, 4, 8 hari, Suhu kamar.

ABSTRACT

Retno Susilaningsih¹, dr. M.I. Diah Pramudianti, Sp.PK (K), M.Sc², dr. Ratna Herawati³. 2017. The Comparison of Serum Alkaline Phosphatase Level (ALP) Before and After 4 and 8 Days of Delay Time at Room Temperature. The Study Program of Four-Year Diploma (D-IV) in Medical Laboratory Technology. The Faculty of Health Sciences. Setia Budi University¹. Clinical Pathology Installation of Regional Public Hospital of Dr. Moewardi (RSDM)², Lecturer at Universitas Setia Budi Surakarta³.

Alkaline phosphatase is an enzyme produced by bile duct, intestines, kidney, and mammary gland which regulates metabolism. Examination of alkaline phosphatase is sometimes delayed due to many reasons, and therefore, samples have to be stored. Serum alkaline phosphatase (ALP) storage is stable at room temperature (20-25°C) within 7 days. The aims of this study was to investigate the difference of serum alkaline phosphatase level before and after 4 and 8 days delay time at room temperature.

This research belongs to analytical observational study with a total of 31 people as samples. The research was carried out in the Clinical Pathology Installation of Regional Public Hospital of Dr. Moewardi (RSDM) in Surakarta in April 2017. The examination of alkaline phosphatase level was conducted using International Federation of Clinical Chemistry (IFCC) method. Data were analyzed using Friedman test and Wilcoxon test with p value <0.05 (significant) and confidence interval of 95%, and reinforced with Bland-Altman method.

The findings reveal that there were 14 male respondents and 17 female respondents, with age mean of 53.10 ± 15.89 and median (min-max) of ALP levels 0, 4, and 8 days of 73(41-419), 75 (40-372), and 79 (36-423), respectively. The differences of serum ALP levels among 0 and 4 days, 0 and 8 days, and 4 and 8 days were $p=0.922$; $p=0.372$; $p=0.256$.

The research results show that there was no difference of serum ALP levels before and after 4 and 8 days of delay time at room temperature. Further research is required at room temperature within 8 days and at refrigerator temperature.

Keywords: Alkaline phosphatase serum level, delay time of 0, 4, and 8 days, room temperature.