ABSTRAK

Latar Belakang: Pemeriksaan APTT (*Activated Partial Thromboplastin Time*) adalah pemeriksaan rutin hemostasis yang digunakan untuk mengevaluasi mekanisme pembekuan darah pasien pada jalur instrinsik dan jalur bersama. Pada jalur tersebut ada faktor koagulasi labil yang dapat dipengaruhi oleh suhu dan waktu pendiaman darah sitrat. Pendiaman darah sitrat dapat terjadi karena jumlah sampel yang terlalu banyak ataupun transportasi sampel yang menyebabkan darah sitrat tidak segera di sentrifugasi untuk mendapatkan plasma sitrat.
Tujuan Penelitian: Mengetahui pengaruh waktu pendiaman darah sitrat pada suhu 2-8°C terhadap nilai *Activated Partial Thromboplastin Time* (APTT).
Metode Penelitian: Jenis penelitian adalah eksperimen semu dengan desain penelitian *post test only design*. Sampel yang digunakan adalah darah sitrat dari 10 orang responden yang diperoleh dengan teknik sampling *simple random sampling*. Masing-masing responden diambil darah sitrat sebanyak lima tabung, yang akan diberikan perlakuan pendiaman selama 0 jam(segera diperiksa), 0.5 jam, 1 jam, 1.5 jam, dan 2 jam pada suhu 2-8°C sebelum disentrifugasi. Terdapat total 50 data yang diolah secara deskriptif dan statistik menggunakan uji *Repeated Measure ANOVA* pada aplikasi SPSS versi 20 *for windows*.
Hasil: Hasil penelitian menunjukan tidak ada pengaruh pendiaman darah sitrat pada suhu 2-8°C terhadap nilai *Activated Partial Thromboplastin Time* (APTT) (p=0,101). Persentase selisih rerata nilai APTT pemeriksaan segera dengan pendiaman darah sitrat pada suhu 2-8°C secara berurutan 0,20% ; 0,10% ; 2,31% ; 4,08% yaitu <10% , yang berarti tidak bermakna secara klinis.
Kesimpulan: Tidak ada pengaruh pendiaman darah sitrat pada suhu 2-8°C terhadap nilai *Activated Partial Thromboplastin Time* (APTT).

Kata Kunci: nilai *Activated Partial Thromboplastin Time* (APTT), Darah Sitrat, Waktu Pendiaman, Suhu.

ABSTRACT

Background: APTT (Activated Partial Thromboplastin Time) test is routine hemostasis tests used to evaluate the patient's blood clotting mechanism on the intrinsic and common pathways. On this pathways, there are labile coagulation factors that can be influenced by storage conditions of the citrate whole blood. Delays of the citrate whole blood can occur due to the large number or transportation of the samples which causes the citrate whole blood to not be immediately centrifuged to obtain citrated plasma.

Research Objective: To determine the effect of the delay time of citrate whole blood at a temperature of 2-8°C on the value of Activated Partial Thromboplastin Time (APTT).

Research Methods: The type of this research is a quasi-experimental with research design is post test only design. This study used citrate whole blood samples from 10 respondents obtained by the simple random sampling technique. For each respondent, five tubes of citrate blood were taken, which would be treated for 0 hours (soon checked), 0.5 hours, 1 hour, 1.5 hours, and 2 hours at a temperature of 2-8°C before being centrifuged. There is a total of 50 data processed descriptively and statistically using the Repeated Measures ANOVA test on the SPSS version 20 application for windows.

Results: The results showed that there was no effect of delays citrate whole blood at a temperature of 2-8°C on the value of Activated Partial Thromboplastin Time (APTT) (p=0.101). Percentage of the difference in the mean of APTT value between citrate whole blood immediately centrifuged with delay at a temperature of 2-8°C, respectively 0,20% ; 0,10% ; 2,31% ; 4,08 % (<10%), which means it is not clinically significant.

Conclusion: There is no effect of delays citrate whole blood at a temperature of 2-8°C on the value of Activated Partial Thromboplastin Time (APTT).

Keywords: Activated Partial Thromboplastin Time (APTT), Citrate Whole Blood, A Delay Time, Temperature.