ABSTRAK

Latar Belakang: *Plasma Protrombin Time* (PPT) adalah pemeriksaan penyaring hemostatis untuk menguji pembekuan darah melalui jalur ekstrinsik dan jalur bersama (faktor pembekuan V, VII, X, fibrinogen, prothrombin). Tahap praanalitik seperti penanganan spesimen dapat mempengaruhi hasil pemeriksaan PPT. Peningkatan waktu penundaan penanganan darah sitrat menyebabkan perubahan stabilitas spesimen karena beberapa faktor koagulasi mempunyai sifat labil.
Tujuan Penelitian: Mengetahui pengaruh pendiaman darah sitrat pada suhu 2-8^{o}C terhadap nilai PPT.
Metode Penelitian: Jenis penelitian yang digunakan berupa eksperimen semu dengan rancangan *posttest only design.* Penelitian ini menggunakan sampel darah sitrat yang dibagi menjadi 5 kelompok perlakukan yaitu pendiaman darah sitrat pada suhu 2-8^{o}C selama 0 jam, 0,5 jam, 1 jam, 1,5 jam, dan 2 jam. Data yang diperoleh dianalisis secara statistik menggunakan uji *Repeated Measures Anova* pada SPSS 20.0 *for windows.*
Hasil Penelitian: Hasil penelitian ini menunjukkan bahwa ada pengaruh nilai PPT pada darah sitrat dengan variasi waktu pendiaman di suhu 2-8^{o}C berdasarkan analisis statistik *Repeated Measures Anova.* Persentase perbedaan nilai PPT pada darah sitrat yang dilakukan pendiaman selama 0,5 jam, 1 jam, 1,5 jam dan 2 jam berturut-turut yaitu 0,08%, 1,72%, 1,87% dan 2,18% persentase perbedaan nilai PPT <10% sehingga tidak menyebabkan perubahan interpretasi secara klinis. Hasil uji lanjut pendiaman darah sitrat selama 0,5 jam, 1 jam, 1,5 jam dan 2 jam tidak memberikan pengaruh signifikan terhadap nilai PPT secara statistik.
Kesimpulan: Ada pengaruh pendiaman darah sitrat pada suhu 2-8^{o}C terhadap nilai PPT. Waktu pendiaman darah sitrat selama 0,5 jam, 1 jam, 1,5 jam dan 2 jam tidak memberikan pengaruh yang bermakna terhadap nilai PPT secara klinik dan statistik.

Kata Kunci: Waktu pendiaman, darah sitrat, *Plasma Protrombin Time* (PPT).

ABSTRACT

Background: Plasma Prothrombin Time (PPT) is a hemostatic screening test to test coagulation system through extrinsic pathway and common pathway (clotting factors V, VII, X, fibrinogen, prothrombine). Preanalytical step such as specimen handling can effect the PPT examination results. The increase in citrate blood delay time causes change in specimen stability due to coagulation factors which are labile.
Research Objective: To identify the effect of delay time of citrate whole blood at a temperature of 2-8^{o}C on the value of PPT.
Research Methods: This research used the quasi-experimental with a posttest only design. This study used citrate whole blood samples divided into 5 treatment groups, among them delay time of citrate whole blood at a temperature of 2-8^{o}C for 0 hours, 0,5 hours, 1 hour, 1,5 hours, and 2 hours. The data were statistically analysis by repeated measurement anova through SPSS 20.0 for windows.
Result: The results of this study indicate an effect on the values of PPT in citrate whole blood with variations in delay time at a temperature of 2-8^{o}C based on repeated measurement anova statistical analysis. The percentage difference average on the value of PPT in delay time of citrate whole blood for 0.5 hours, 1 hour, 1.5 hours and 2 hours were 0,08%, 1,72%, 1,87% and 2, 18% the percentage difference on the value of PPT <10% so that it does not cause a change in clinical interpretation. The further test results delay time of citrate whole blood during 0,5 hours, 1 hour, 1,5 hours and 2 hours does not have a significant effect on the value of PPT statistically.
Conclusion: There is an effect of delay time of citrate whole blood at a temperature of 2-8^{o}C on the value of PPT. The delay time of citrate whole blood for 0,5 hours, 1 hour, 1,5 hours and 2 hours does not have a significant effect on the value of PPT clinically and statistically.

Keyword: Delay time, Citrate blood, Plasma Prothrombin Time (PPT).