

ABSTRAK

Latar Belakang: Pemeriksaan *Activated Partial Thromboplastin Time*(APTT) merupakan parameter pemeriksaan koagulasi yang digunakan untuk mengidentifikasi defisiensi faktor intrinsik sistem pembekuan darah dan memantau terapi antikoagulan. Tahap praanalitik pemeriksaan laboratorium merupakan objek Pematapan Mutu Internal(PMI). Pengolahan dan penyimpanan spesimen yang tidak tepat dapat mempengaruhi hasil pemeriksaan laboratorium.

Tujuan Penelitian: Mengetahui pengaruh lama penyimpanan plasma sitrat pada suhu 2 – 8° C terhadap nilai *Activated Partial Thromboplastin Time*(APTT).

Metode Penelitian: Jenis penelitian ini adalah praeksperimen dengan desain penelitian *posttest only design*. Sampel yang digunakan yaitu plasma sitrat yang berasal dari 18 orang. Sampel plasma sitrat dibagi ke dalam 4 cup plasma atau vial yang telah diberi identitas sesuai dengan variasi waktu penyimpanan. Plasma sitrat disimpan selama 0 jam(pemeriksaan segera), 2 jam, 4 jam dan 6 jam. Data primer yang diperoleh kemudian dianalisis secara deskriptif dan statistik yang meliputi uji distribusi data serta uji *repeated measures ANOVA*.

Hasil Penelitian: Hasil penelitian menunjukkan bahwa ada perbedaan rerata hasil pemeriksaan plasma sitrat dengan variasi waktu penyimpanan 0 jam(pemeriksaan segera), 2 jam, 4 jam dan 6 jam yaitu 29,37 detik; 30,27 detik; 31,27 detik dan 31,62 detik. Hasil uji *repeated measures ANOVA* menunjukkan $p (0,000) < 0,05$ yang berarti bahwa ada perbedaan nilai APTT plasma sitrat yang disimpan pada suhu 2 – 8° C dengan variasi waktu penyimpanan yaitu 0 jam(pemeriksaan segera), 2 jam, 4 jam dan 6 jam. Nilai APTT plasma sitrat yang disimpan pada variasi waktu 4 jam dan 6 jam telah memberikan pengaruh yang signifikan secara statistik.

Kesimpulan: Ada pengaruh lama penyimpanan plasma sitrat pada suhu 2 – 8° C terhadap nilai *Activated Partial Thromboplastin Time*(APTT).

Kata Kunci: *Activated Partial Thromboplastin Time*(APTT), plasma sitrat, lama penyimpanan.

ABSTRACT

Background: The Activated Partial Thromboplastin Time (APTT) is a coagulation test parameter used to identify deficiencies of intrinsic factor in the blood coagulation system and monitor anticoagulant therapy. The pre-analysis stage of laboratory examination is the object of Internal Quality Control (IQC). Improper processing and storage of specimens can affect the results of laboratory test.

Research Objective: Determine the effect of citrate plasma storage time at 2 – 8° C on the value of the Activated Partial Thromboplastin Time (APTT).

Research Methods: Type of this research is a pre-experiment with a posttest only design. The sample used was plasma citrate from 18 people. Citrate plasma sample was divided into 4 plasma cups or vials that had been identified according to the variation in storage time. Plasma citrate was stored for 0 hours (immediate examination), 2 hours, 4 hours and 6 hours. The primary data obtained were then analyzed descriptively and statistically which includes the data distribution test and repeated measures ANOVA test.

Results: The results showed that there were differences in the mean results of citrate plasma with variations in storage time of 0 hours (immediate examination), 2 hours, 4 hours and 6 hours that is 29,37 seconds; 30,27 seconds; 31,27 seconds and 31,62 seconds. Repeated measures ANOVA showed $p(0.000) < 0.05$, which means that there is a difference in the APTT value of citrate plasma stored at 2 – 8° C with variations in storage time, that is 0 hours (immediate examination), 2 hours, 4 hours and 6 hours. The APTT values of citrate plasma stored at various times of 4 hours and 6 hours had a statistically significant effect.

Conclusion: There is an effect of citrate plasma storage time at 2 – 8° C on the Activated Partial Thromboplastin Time (APTT) value.

Keywords: Activated Partial Thromboplastin Time (APTT), citrate plasma, storage time.