

ABSTRAK

Latar Belakang : *Activated Partial Thromboplastin Time* (APTT) merupakan salah satu pemeriksaan faal hemostasis yang umumnya dilakukan untuk pasien praoperasi dan pasien dengan riwayat gangguan hemostasis. Tahapan praanalitik menjadi cakupan Pemantapan Mutu Internal (PMI) yang harus diperhatikan dalam pemeriksaan ini. Namun, pada pelaksanaan di lapangan acap kali terjadi penangguhan pemeriksaan. Penyimpanan plasma sitrat dapat menyebabkan pemanjangan nilai APTT.

Tujuan : Mengetahui pengaruh lama penyimpanan plasma sitrat pada suhu $25\pm 1^{\circ}\text{C}$ terhadap nilai APTT.

Metode : Jenis penelitian ini adalah pra eksperimen dengan desain *one group pretest posttest only*. Penelitian ini menggunakan plasma sitrat dari 18 orang yang diperoleh melalui teknik *purposive sampling*. Masing-masing sampel dibagi ke dalam 4 vial dengan 1 kelompok *baseline (pretest)* yaitu pemeriksaan 0 jam (segera) dan 3 kelompok perlakuan (*posttest*) berupa penyimpanan plasma sitrat selama 2, 4 dan 6 jam pada suhu $25\pm 1^{\circ}\text{C}$. Terdapat total 72 data hasil pemeriksaan yang selanjutnya dianalisis secara deskriptif dan statistik dengan uji *Repeated Measures Anova* pada SPSS 16.0 for windows.

Hasil : Hasil penelitian menunjukkan ada perbedaan nilai APTT pada pemeriksaan plasma sitrat 0 jam (segera) dengan setelah penyimpanan plasma sitrat 2, 4 dan 6 jam pada suhu $25\pm 1^{\circ}\text{C}$ didasarkan pada nilai $p < 0,05$. Persentase rerata perbedaan nilai APTT pada pemeriksaan 2, 4 dan 6 jam berturut-turut adalah 3%, 6% dan 7%. Lama penyimpanan plasma sitrat 2 jam sudah memberikan pengaruh signifikan terhadap nilai APTT.

Kesimpulan : Ada pengaruh lama penyimpanan plasma sitrat pada suhu $25\pm 1^{\circ}\text{C}$ terhadap nilai APTT.

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

ABSTRACT

Background: Activated Partial Thromboplastin Time (APTT) is a hemostatic treatment test for patients before surgery and patients who have a history of the hemostatic disorder. In this test, pre-analytical stage must be considered since it covers the Internal Quality Control (PMI). However, the real implementation of the test often gets a suspension. It happens because citrate plasma storage can affect prolonged APTT value.

Objective of the Study: To identify the effect of citrate plasma storage duration at $25\pm 1^{\circ}\text{C}$ temperature to APTT value.

Research Methods: The research used the pre-experimental method by using One-group pretest-posttest design. The use of citrate plasma was from 18 participants which were obtained through Sampling Purposive technique. Each sample was divided into 4 vials; one group was baseline (pretest) which examined 0-hour (immediately) whereas three groups were treatment (*posttest*) in the form of citrate plasma storage for 2 hours, 4 hours, and 6 hours at $25\pm 1^{\circ}\text{C}$ temperature. In this case, there were 72 data collected from the APTT test. The test was analyzed by Repeated Measures ANOVA descriptively and analytically through SPSS 16.0 for windows.

Result: The research pointed out that there is a difference of APTT value towards citrate plasma test by 0-hour (immediately) with citrate plasma after storage during 2 hours, 4 hours, and 6 hours at $25\pm 1^{\circ}\text{C}$ temperature. The data were based on $p < 0,05$ value. Besides, mean percentage differences of 2 hours, 4 hours, and 6 hours consecutively were 3%, 6%, and 7%. Here, citrate plasma storage duration for 2 hours had given significant results to APTT value.

Conclusion: There is an effect among citrate plasma storage duration at $25\pm 1^{\circ}\text{C}$ temperature to APTT value.

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