

## ABSTRAK

**Latar Belakang:** Trigliserida merupakan salah satu pemeriksaan laboratorium yang digunakan untuk mendiagnosis penyakit kardiovaskular. Penyimpanan sampel serum bertujuan meminimalisir terjadinya pengambilan sampel ulang, serta mengantisipasi jika terdapat keraguan hasil maupun pemeriksaan tambahan. Penyimpanan serum yang tidak tepat mengakibatkan laju degradasi, pelepasan material serta perubahan komposisi pada darah maupun serum yang menyebabkan hasil pemeriksaan tidak tepat.

**Tujuan Penelitian:** Mengetahui ada tidaknya pengaruh penyimpanan serum dalam tabung SST (*Serum Separator Tube*) terhadap kadar Trigliserida yang diperiksa segera dan disimpan selama 7 hari pada suhu 2-8°C.

**Metode penelitian:** Jenis penelitian yang digunakan pada penelitian ini yaitu *pre-experimental* dengan desain penelitian *One Group Pretest Posttest*. Penelitian ini menggunakan 35 responden, Dilakukan 2 perlakuan terhadap sampel serum, segera diperiksa dan disimpan dalam *Serum Separator Tube* selama 7 hari pada suhu 2-8°C. Data yang diperoleh dianalisis secara statistik dengan uji normalitas data dan uji *Willcoxon*.

**Hasil Penelitian:** Hasil rata-rata kadar trigliserida pada serum segera diperiksa adalah 62,09 mg/dl, dan kadar trigliserida pada serum yang disimpan dalam *Serum Separator Tube* selama 7 hari pada suhu 2-8°C adalah 62,86 mg/dl. Selisih rerata kedua perlakuan didapatkan hasil 0,77 (1,24%). Hasil analisis statistik menggunakan uji willcoxon didapatkan nilai signifikan 0,120.

**Kesimpulan:** Tidak ada perbedaan kadar trigliserida segera diperiksa dan disimpan dalam *Serum Separator Tube* pada suhu 2-8°C selama 7 hari. Penyimpanan serum menggunakan *Serum Searator Tube* selama 7 hari pada suhu 2-8°C tidak menyebabkan perubahan interpretasi hasil secara klinis terhadap kadar trigliserida karena presentase perbedaan <15%.

**Kata kunci:** *Serum Separator Tube*, penyimpanan, trigliserida

## ABSTRACT

**Background:** Triglyceride is one of the laboratory tests used to diagnose cardiovascular disease. Storage of serum samples aims to minimize the occurrence of re-sampling, and anticipate if there are doubts about the results or additional examinations. Improper storage of serum results in the rate of degradation, release of material and changes in the composition of blood and serum which cause incorrect examination results.

**Research Objective:** To determine whether there is an effect of serum storage in SST tubes (Serum Separator Tube) on Triglyceride levels examined immediately and stored for 7 days at 2-8°C.

**Research method:** The type of research used in this study is pre-experimental with a One Group Pretest Posttest research design. This study used 35 respondents, 2 treatments were carried out on serum samples, immediately examined and stored in a Serum Separator Tube for 7 days at a temperature of 2-8°C. The data obtained were analyzed statistically with data normality test and Willcoxon test.

**Results:** The average triglyceride level in the serum immediately examined was 62.09 mg/dl, and the triglyceride level in serum stored in a Serum Separator Tube for 7 days at 2-8°C was 62.86 mg/dl. The mean difference between the two treatments was 0.77 (1.24%). The results of statistical analysis using the willcoxon test obtained a significant value of 0.120.

**Conclusion:** No differences in triglyceride levels were immediately examined and stored in Serum Separator Tube at 2-8°C for 7 days. Storage of serum using Serum Separator Tube for 7 days at 2-8°C does not cause changes in the interpretation of clinical results on triglyceride levels because the percentage difference is <15%.

**Keywords:** Serum Separator Tube, storage, triglyceride