

ABSTRAK

Latar Belakang: Pemeriksaan AST cara manual atau semi-automatis metode kinetik enzimatis harus membuat reagen kerja atau monoreagen dalam jumlah lebih. Dengan metode kinetik enzimatis reagen AST sensitif terhadap suhu dan cahaya, hal dapat mempengaruhi kestabilan reagen AST.

Tujuan: Mengetahui pengaruh lama penyimpanan reagen kerja pada suhu 2-8⁰C selama 2 minggu dan 4 minggu terhadap hasil pemeriksaan AST.

Metode: Jenis penelitian ini adalah penelitian eksperimen semu dengan rancangan *posttest only control grup design*. Subjek penelitian ini sisa sampel serum pasien di RSUP. Dr. Sardjito. Sampel serum normal dan patologis kadar AST diatas normal dengan jumlah 16 sampel diperiksa dengan reagen kerja AST segera dipakai, disimpan selama 2 minggu dan 4 minggu pada suhu 2-8⁰C . Uji analisis statistik menggunakan uji distribusi dan uji beda 2 sampel.

Hasil: Rata-rata pengaruh lama penyimpanan reagen kerja suhu 2-8⁰C terhadap aktivitas enzim AST selama 2 minggu sebesar 57,13 pada sampel patologis dan 17,00 pada sampel normal, penyimpanan 4 minggu sebesar 76,13 pada sampel patologis dan 17,13 pada sampel normal. Hasil menunjukkan tidak ada pengaruh lama penyimpanan reagen kerja pada suhu 2-8⁰C terhadap hasil pemeriksaan aktivitas enzim AST ($p=0,159$ dan $p=0,944$) pada sampel normal dan ($p=0,102$ dan $p=0,248$) pada sampel patologis.

Kesimpulan: Tidak ada pengaruh lama penyimpanan reagen kerja pada suhu 2-8⁰C terhadap hasil pemeriksaan aktivitas enzim *Aspartat Aminotransferase* (AST) pada sampel serum normal dan patologis.

Kata Kunci: lama penyimpanan, reagen kerja, suhu 2-8⁰C

ABSTRACT

Background: aspartate aminotransferase (AST) enzyme inspection of a semi-automatic or manual kinetic method of enzymatic methods should make a reagent of work or more monoreagents. With the kinetic methods of reagent AST sensitive to temperature and light, it can affect AST's stability.

Purpose: knowing the effects of the old reagency storage at a temperature of 2-8°C for 2 weeks and 4 weeks on the results of the AST examination.

Method: this kind of research was an achievement with the design of the posttest only design group. The subject of this study was the rest of the patient's serum sample in RSUP. Dr. Sardjito. A normal and pathological sample of 16 samples examined with ast reagents was immediately used, stored for 2 weeks and 4 weeks at a temperature of 2-8°C. Statistical analysis test used distribution tests and two-sample differential tests in pairs.

Results: average effects of of storage of working reagents at 2-8 temperature works at the ast 2-week enzyme activity of 57.13 on pathological samples and 17,00 on normal samples, a 4-week deposit of 76.13 on pathological samples and a 17.13 on normal samples. Results show no long-term effects on the reagent storage at a temperature of 2-8 compounds c on the activity of the AST enzyme ($p= 0.159$ and $p= 0.944$) on normal samples and ($p= 0.102$ and $p= 0.248$) on the pathological sample.

Conclusion: There was no effect of storage of working reagents at a 2-8 disperc temperature against inspection of aspartate aminotransferase (AST) enzyme on normal and occupational sample serum.

Keywords: storage habits, occupational reagents, temperature 2-8°C