

ABSTRAK

Latar Belakang: Kanker payudara merupakan jenis kanker dengan kasus terbanyak di Indonesia dan menjadi penyebab utama kematian. Kemoterapi sebagai terapi utama berisiko menyebabkan hepatotoksisitas, sehingga diperlukan pemantauan fungsi hati melalui pemeriksaan SGPT (ALT) yang merupakan indikator kerusakan hepatosit. Dalam praktik laboratorium, spesimen serum sering disimpan untuk pemeriksaan tambahan, namun stabilitas analit seperti SGPT dapat terpengaruh oleh waktu dan suhu penyimpanan. Pedoman Kementerian Kesehatan menyebut SGPT stabil selama 7 hari pada suhu 2–8°C.

Tujuan Penelitian: Mengetahui perbedaan aktivitas SGPT pada serum pasien kanker payudara pasca-kemoterapi yang diperiksa segera dan setelah disimpan selama 7 hari pada suhu 2–8°C. Untuk mengetahui rerata hasil pemeriksaan aktivitas SGPT pada serum pasien kanker payudara yang diperiksa segera. Untuk mengetahui rerata hasil pemeriksaan aktivitas SGPT pada serum pasien kanker payudara yang disimpan 7 hari. Mengetahui selisih rata-rata hasil pemeriksaan aktivitas SGPT pada serum pasien kanker payudara yang diperiksa segera dan ditunda 7 hari.

Metode Penelitian: Penelitian ini merupakan penelitian pra-eksperimental dengan desain One Group Pre-Post Test Design. Sebanyak 35 sampel digunakan, masing-masing dilakukan dua kali pengulangan pemeriksaan. Data dianalisis secara deskriptif dan statistik, diawali dengan uji normalitas Shapiro-Wilk dan dilanjutkan dengan uji Paired Sample T-Test.

Hasil Penelitian: Hasil menunjukkan terdapat perbedaan aktivitas SGPT antara pemeriksaan segera dan setelah penyimpanan, namun tidak signifikan secara klinis. Rata-rata aktivitas SGPT segera adalah 39,8 U/L dan setelah penyimpanan adalah 37,1 U/L.

Kesimpulan: Terdapat perbedaan aktivitas SGPT pada serum pasien kanker payudara pasca-kemoterapi yang diperiksa segera dan setelah disimpan selama 7 hari pada suhu 2–8°C, namun perbedaan tersebut tidak signifikan secara klinis.

Kata Kunci: SGPT, serum pasien kanker payudara dan penyimpanan serum

ABSTRACT

Background: Breast cancer is the most common type of cancer in Indonesia and a leading cause of death. Chemotherapy, as a primary therapy, carries the risk of hepatotoxicity, necessitating monitoring of liver function through SGPT (ALT) examination, which is an indicator of hepatocyte damage. In laboratory practice, serum specimens are often stored for additional testing; however, the stability of analytes like SGPT can be affected by storage time and temperature. The Ministry of Health guidelines state that SGPT is stable for seven days at 2–8°C.

Objective: To determine the difference in SGPT levels in serum of post-chemotherapy breast cancer patients examined immediately and after storage for seven days at 2–8°C. This study aims to determine the average SGPT levels in the serum of breast cancer patients examined immediately, as well as those whose serum samples were stored for seven days before testing. Additionally, it seeks to identify the difference in the average SGPT levels between the immediately tested samples and those tested after the 7-day delay.

Methods: This research was a pre-experimental study with a One Group Pre-Post Test Design. A total of 35 samples were used, with each sample undergoing duplicate testing. Data were analyzed descriptively and statistically, starting with the Shapiro-Wilk normality test and followed by the Paired Sample T-Test.

Results: The results showed a difference in SGPT levels between immediate examination and after storage, but this difference was not clinically significant. The mean SGPT level for immediate examination was 39,8 U/L, and after storage, it was 37.1 U/L.

Conclusion: There was a difference in SGPT levels in the serum of post-chemotherapy breast cancer patients examined immediately and after storage for seven days at 2–8°C; however, this difference was not clinically significant.

Keywords: SGPT, breast cancer serum and serum storage.