

Perbedaan Kadar Kadar Serum *Glutamic Oxaloacetic Transaminase* (SGOT) Sebelum dan Sesudah Aktivitas

Khairunnisa¹, Andri Sukeksi², dr.Junaidi Wibawa³

1. Program Studi DIV Analis Kesehatan Fakultas Ilmu Keperawatan dan Kesehatan Muhammadiyah Semarang
2. Laboratorium Patologi Klinik Fakultas Ilmu Keperawatan dan Kesehatan Universitas Muhammadiyah Semarang
3. Dokter Patologi Klinik RSUD Bendan Kota Pekalongan

ABSTRAK

Aktivitas fisik dapat menimbulkan atau memicu ketidakseimbangan antara produksi radikal bebas dengan antioksidan tubuh sehingga konsumsi oksigen didalam tubuh dapat meningkat 20 kali. Keadaan ini menimbulkan kerusakan sel, sel-sel otot termasuk sel otak dan hati sehingga *Glutamat Oksaloasetat Transaminase* keluar dari sitoplasma dari suatu sel yang rusak dan makin lama kadarnya akan makin meningkat jumlahnya dalam darah. Penelitian ini bertujuan untuk mengetahui perbedaan kadar *Serum Glutamic Oxaloacetic Transaminase* (SGOT) sebelum dan sesudah aktivitas. Desain penelitian adalah *quasi experiment* dengan pendekatan *one group pretest and posttest design*. Sampel penelitian adalah peserta senam di sanggar senam Berliana Kedungwuni. Pekalongan sebanyak 30 orang. Alat pengumpulan data adalah tabung reaksi, spuit 3cc, mikropipet 100 µl, 200 µl, 800 µl, tip kuning, tip biru, photometer 5010, sentrifuge. Hasil uji *wilcoxon* menunjukkan ada perbedaan kadar *Serum Glutamic Oxaloacetic Transaminase* (SGOT) sebelum dan sesudah aktivitas dengan *p value* $0003 < 0,05$. Insitusi kesehatan disarankan memberikan konseling pada pasien yang akan menjalani pemeriksaan SGOT untuk beristirahat cukup dan tidak melakukan aktivitas fisik yang terlalu berat sehingga tidak mempengaruhi hasil pemeriksaan SGOT.

Kata kunci : aktivitas, *Serum Glutamic Oxaloacetic Transaminase* (SGOT)

Differences of Serum Glutamic Oxaloacetic Transaminase (SGOT) Levels before and after Activity

Khairunnisa¹, Andri Sukeksi², dr.Junaidi Wibawa³

1. Health Analysis Study Program Nursing And Health Science Faculty Muhammadiyah Semarang University
2. Clinical Pathologi Laboratory, Nursing and Health Faculty, Muhammadiyah University of Semarang
3. Doctor of clinical pathology at RSUD Bendan Pekalongan City

ABSTRACT

Physical activity cause imbalance between the production of free radicals and the body's antioxidants so that oxygen consumption in the body can increase 20 times. This condition causes damage to cells, muscle cells including brain and liver cells that *Glutamate Oxaloacetate Transaminases* get out of the cytoplasm from a damaged cell and the longer it will increase in number in the blood. This study aimed determined differences of *Serum Glutamic Oxaloacetic Transaminase* (SGOT) levels before and after activity. The research design used quasi experiment with one group pretest and posttest design approach. The sample of this research gymnastics participants at Berliana Gymnasium ini Kedungwuni Pekalongan Regency as many as 30 people. The instrument of research used test tubes, 3cc syringes, 100 µl micropipets, 200 µl, 800 µl, yellow tips, blue tips, 5010 photometers and centrifuges. The wilcoxon results showed there was difference of *Serum Glutamic Oxaloacetic Transaminase* (SGOT) levels before and after activity with p value 0003 <0.05. Health institution should provide counseling to patients who will undergo SGOT test to be have adequate rest and not to carry out physical activities too heavy that affect the SGOT test results.

Keywords : activity, *Serum Glutamic Oxaloacetic Transaminase* (SGOT)