

## INTISARI

**Latar belakang :** Penyakit tuberkulosis masih menjadi masalah kesehatan di dunia. Menurut data statistik *World Health Organization* (WHO) menunjukkan Indonesia menduduki peringkat kesembilan dengan insidensi 185 kasus per 100 ribu penduduk dan peringkat ketiga dalam regional Asia-Tenggara. Obat anti tuberculosis (OAT) lini pertama yang cenderung mempunyai efek hepatotoksik antara lain isoniazid, rifampifisin, dan pirazinamid. Penelitian ini ditujukan untuk mengetahui kadar serum SGOT dan SGPT pada pasien TB paru sebelum dan sesudah pemberian OAT fase awal.

**Desain penelitian :** Penelitian ini menggunakan jenis penelitian observasional dengan desain penelitian studi kohort. Pengamatan dilakukan pada penderita Tuberkulosis yang mendapatkan terapi OAT selama 2 bulan terhadap kadar SGOT-SGPT sebelum dan sesudah pengobatan. Subjek penelitian adalah pasien TB paru kasus baru berusia  $\geq 16$  tahun. Bahan pemeriksaan berupa sampel darah vena mediana cubiti untuk mengukur kadar SGOT dan SGPT.

**Hasil :** Subjek penelitian berjumlah 19 orang. Pemeriksaan kadar SGOT dan SGPT dilakukan sebelum dan sesudah pemberian OAT fase awal. Hasil analisis data perubahan kadar SGOT menunjukkan bahwa nilai signifikansi  $p= 0,023$  ( $p < 0,05$ ). Hal ini menunjukkan bahwa terdapat perbedaan kadar SGOT sebelum dan sesudah pemberian OAT fase awal.. Hasil analisis data perubahan kadar SGPT menunjukkan bahwa nilai signifikansi  $p= 0,007$  ( $p < 0,05$ ). Hal ini menunjukkan bahwa terdapat perbedaan kadar SGPT sebelum dan sesudah pemberian OAT fase awal.

**Kesimpulan :** Pada penelitian ini didapatkan hasil bahwa terdapat perbedaan kadar SGOT-SGPT sebelum dan sesudah pemberian obat anti tuberkulosis fase awal.

**Kata kunci:** Tuberkulosis, SGOT, SGPT, OAT, Fase Awal

## **ABSTRACT**

**Background:** Tuberculosis is still a health problem in the world. According to statistics of the World Health Organization (WHO) show Indonesia was ranked number 9<sup>th</sup> with an incidence of 185 cases per 100 thousand inhabitants, and ranks 3<sup>rd</sup> in the region of Southeast Asia. Anti-tuberculosis drugs (OAT) first-line tend to have hepatotoxic effects include isoniazid, rifampicin, and pyrazinamide. This study aimed to determine the serum levels of SGOT (AST) and SGPT (ALT) in patients with pulmonary tuberculosis before and after administration of the initial phase OAT.

**Research Design:** This study used observational cohort study research design. Observations were carried out in patients with tuberculosis who received therapy for 2 months OAT against SGOT-SGPT before and after treatment. Subjects were new cases of pulmonary TB patients aged  $\geq 16$  years. Materials examination such median cubital vein blood samples to measure levels of SGOT and SGPT.

**Results:** The research subjects are 19 people. Examination of SGOT and SGPT performed before and after administration of the initial phase OAT. The results of data analysis showed that changes in the levels of SGOT significance p value = 0.023 ( $p < 0.05$ ). This suggests that there are differences in the levels of SGOT before and after administration of the initial phase OAT. The results of data analysis showed that changes in SGPT levels of significance p value = 0.007 ( $p < 0.05$ ). This suggests that there are differences in the levels of SGPT before and after administration of the initial phase OAT.

**Conclusion:** This study showed that there are differences in the levels of SGOT-SGPT before and after administration of the initial phase of anti-tuberculosis drugs.

**Keyword :** Tuberculosis, SGOT, SGPT, Anti-tuberculosis drugs ( OAT ), Initial phase