

## ABSTRAK

Tuberkulosis (Tb) paru saat ini termasuk masalah kesehatan global utama terutama di Indonesia. Tuberkulosis merupakan penyakit yang disebabkan oleh *Mycobacterium Tuberculosis*. Obat anti tuberkulosis memiliki efek salah satunya adalah hepatoksisitas yang dapat dilihat dari peningkatan enzim ALT. Tujuan penelitian ini untuk mengetahui gambaran kadar enzim *alanin transaminase* berdasarkan karakteristik pasien dan lama pengobatan pada pasien tuberkulosis paru di RSUD Al-Ihsan Tahun 2018. Penelitian ini menggunakan metode deskriptif kategorik dengan rancangan *cross-sectional*, dengan pemilihan sampel secara *purposive sampling*. Data didapat dari rekam medis RSUD Al-Ihsan tahun 2018 dengan 69 sampel yang memenuhi kriteria inklusi dan eksklusi. Hasil penelitian menunjukkan pasien TB Paru yang mengalami peningkatan enzim ALT sebanyak 14 pasien (20,2%). Peningkatan enzim ALT terjadi lebih banyak pada laki-laki pasien TB paru (11 pasien (15,9%)) dan rusia ( $\geq 35$  tahun yaitu sebanyak 10 pasien (15,9%). Pasien TB paru paling banyak mengalami peningkatan enzim ALT pasien (15,9%) minggu mengonsumsi OAT yaitu 5 pasien (7,2%). Hepatotoksisitas disebabkan oleh ikatan antara molekul obat dengan enzim P450 sehingga menyebabkan pembentukan metabolit reaktif beracun yang dapat merusak sel hepatosit. Hepatotoksisitas terjadi sejalan dengan lamanya paparan obat.

**Kata kunci:** Enzim ALT, Obat Anti Tuberkulosis, Tuberkulosis

## **ABSTRACT**

*Pulmonary tuberculosis (TB) is currently a major global health problem, especially in Indonesia. Tuberculosis is a disease caused by Mycobacterium Tuberculosis. Anti-tuberculosis drugs have an effect, one of which is hepatotoxicity which can be seen from the increase of the ALT enzyme. The purpose of this study was to find out the overview of alanine transaminase levels based on patient characteristics and duration of treatment in pulmonary tuberculosis patients in Al-Ihsan Regional Public Hospital in 2018. This study used a categorical descriptive method with a cross-sectional design, and sample selection by purposive sampling. Data was obtained from the medical records of Al-Ihsan Regional Public Hospital in 2018 with 69 samples that met the inclusion and exclusion criteria. The results showed that pulmonary TB patients who experienced an increase in the ALT enzyme found in 14 patients (20.2%). The increase in the ALT enzyme occurred more in males, which is 11 patients (15.9%) and there were 11 patients (15.9%) aged 35 years. 5 pulmonary TB patients (7.2%) had the most increase in ALT enzymes after 4 weeks of taking OAT. Hepatotoxicity is caused by the bond between the drug molecule and the P450 enzyme, causing the formation of toxic reactive metabolites that can damage hepatocyte cells. Hepatotoxicity occurs in line with the duration of drug exposure.*

**Keyword:** ALT enzyme, Anti Tuberculosis Drug, Tuberculosis