

The Treatment Effect of Turmeric (*Curcuma domestica* Val.) Rhizome Extract to Reduce Serum Transaminase Level on Paracetamol Induced Liver Toxicity in Wistar White Male Rats (*Rattus norvegicus*)

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Abstract : Background: Liver injury caused by paracetamol is marked by increased serum transaminase levels. Turmeric is a local herb that is available in large quantities and inexpensive in contradiction to its substantial benefits, including its potency to increase glutathione production and regenerate hepatocyte into normal condition. Aim: The aim of this study was to analyze the potential treatment effect of turmeric rhizome extract to reduce serum transaminase level on paracetamol induced liver toxicity in rats. Methods: This study was a laboratory experimental research with post-test only controlled group design. A group of 24 Wistar white male rats was induced with paracetamol 360 mg/kg body weight for 10 days. The group was then separated into four groups: the first and the second was treated with 100 mg/kg body weight and 150 mg/kg body weight of turmeric rhizome extract, subsequently, the third as positive control was given 27 mg/kg body weight of lesichol, while the fourth as negative control was given CMC-Na 1%. Each of this treatment was given for seven days. At the end of the study, the blood samples were taken to measure SGOT and SGPT levels. The one-way Anova test revealed significant difference in mean of SGPT level ($p=0,001$). The LSD test showed significant differences of SGPT levels in both treatment groups and negative control group. However, there was no significant difference between positive control and both treatment groups. Conclusion: *Curcuma domestica* Val. rhizome extract could not reduce SGOT level, but it reduced SGPT level significantly.

Keywords : *Curcuma domestica* val., SGOT, SGPT, paracetamol, liver toxicity

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