

THE EFFECT REPEATED EXPOSURES ARTEMISININ OF WHITE PULP DIAMETER AND SPLEEN INDEX ON MICE (*Mus musculus*) WHICH INFECTED BY *Plasmodium berghei*

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ABSTRACT

This study is aimed to know the effect repeated exposures artemisinin of diameter white pulp and spleen index on mice (*Mus musculus*) which infected by *Plasmodium berghei*. Forty eight mice divided into twenty mice for four control groups namely K1, K2, K3, K4 which infected by *Plasmodium berghei* in the amount of 1×10^5 in 0,2 ml without gave artemisinin, twenty mice for four treatment groups namely P1, P2, P3, P4 which infected by *Plasmodium berghei* in the amount of 1×10^5 with repeated exposures artemisinin, and eight mice used as donor. The data were analyzed by univariate ANOVA using SPSS and followed with Duncan's test. The results of statistical analysis showed the size of control group's white pulp diameter were different from the treatment groups. While, the result of spleen index showed the difference between control groups and treatment groups, except for the fourth artemisinin exposures there was no real difference with control groups. According the study, gave repeated exposures artemisinin antimalarial reacted to white pulp diameter and spleen index on mice (*Mus musculus*) which infected by *Plasmodium berghei*, but after gave the fourth artemisinin it gave not effect to mice spleen index (*Mus musculus*) which infected by *Plasmodium berghei*.

Key Words: Artemisinin, White pulp diameter, Spleen index, *Plasmodium berghei*