

POTENCY OF CURCUMIN ON HISTOPATHOLOGICAL CHANGES IN THE LIVER OF PREGNANT MICE INTOXICATED BY CADMIUM

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ABSTRACT

Cadmium is one of heavy metal that caused disturbance to kind of organs. Liver is the main target of Cadmium Intoxication. The damage of the liver caused by oxidative stress which cause lipid peroxidation. Lipid peroxidation made changes in the cells that lead to death of the cells or necrosis. The purpose of this study was to know the histopathological changes of liver through the amount of total hepatocytes necrosis. Twenty *Mus musculus* divided into four different groups. K0 as negative control group, K1 as positive control group which injected by Cadmium 4,5mg/kgBW, K2 as the group that given Curcumin therapy 150mg/kgBW and K3 as the group that given Curcumin therapy 300mg/kgBW. Day 17 all mice were sacrificed for histopathological examination. The result of the experiment get through examination of total hepatocytes necrosis from 500 hepatocytes that observed by light microscope with 400x magnification. The data was analyzed by ANOVA and Honestly Significant Difference test (HSD/ Tukey). Result showed that the number of hepatocyte necrosis decreased in compliance with the dose of Curcumin administration. The conclusion is Curcumin can decrease the number of cell death and improve the quality of hepar histopatology.

Keywords: Cadmium, Necrosis, Curcumin, Hepatocyte