

**POTENCY OF CURCUMIN ON HISTOPATHOLOGICAL CHANGES IN  
THE KIDNEY OF PREGNANT MICE (*Mus musculus*) EXPOSED TO  
CADMIUM**

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**ABSTRACT**

Cadmium is a heavy metal that is toxic to humans. Curcumin is the yellow pigment derived from *Curcuma longa* that has antioxidant activity. The purpose of this study is to determine the potency of curcumin on histopathological changes in the kidney of pregnant mice (*mus musculus*) exposed to cadmium. 20 pregnant mice were divided into four groups. P0 were injected aquadest + 0.5% CMC Na liquid. P1 were injected by cadmium chloride 4.5 mg/kg BW + 0.5% CMC Na liquid. P2 were injected by cadmium chloride 4.5 mg/kg BW + curcumin 150 mg/kg BW. P3 were injected by cadmium chloride 4.5 mg/kg BW + curcumin 300 mg/kg BW. On the 17th day of gestation, all mice were sacrificed for histopathological examination. The data was analyzed by Kruskal-Wallis test and followed by Z test. Giving curcumin doses of 300 mg/kg BW can repair picnosis and hydropic degeneration on kidney histopathology. Curcumin as antioxidant dan chelating agents. The results showed that curcumin can reduce the histological damage of pregnant mice kidney which had been exposed to cadmium.

Key words: Cadmium, Curcumin, Kidney histopathology, pregnant mice