ABSTRACT

INFLUENCE OF CHITOSAN TO LIVER OF MICE (Mus musculus L) THAT INDUCED BY PLUMBUM ACETATE

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Increasing of industry nowadays give impact to increasing of air pollution, plumbum (Pb) is one of them. Plumbum is a toxic metal which in certain level harm the body. In cellular level, Pb can cause oxidative stress by increasing of Reactive oxygen Species (ROS). Liver is one of organ that get the impact. Increasing of ROS can be reduced by antioxidant. Chitosan, derivate of chitin, is an extract of crustacean skin that have antioxidant effect. The purpose of this research are to see influence of chitosan and plumbum acetate to liver histopathology. This research is a pure experimental with post-test control group design. The experimental samples are 25 mice (Mus musculus L) which devided into 5. The results show the average damage in positive control group is 20, average damage in negative control group is 0, average damage in first treatment group is 20, average damage in second treatment group is 12 and average damager in third treatment group is 15. Based on Kruskall Wallis test, p=0,001 which means there is a meaningful relationship. To conclude, giving of plumbum give an effect to liver samples and administration of chitosan give an impact to liver samples that induced by plumbum acetate.

Keywords: Chitosan, Liver, Plumbum