TEST OF VITAMIN C ON THE PREVENTION OF LIVER DAMAGE

CAUSED BY PLUMBUM (Pb) IN MICE (Mus Musculus)

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ABSTRACT

Vitamin C (ascorbic acid) is an antioxidant that can reduce free radicals and reactive oxygen species (ROS) which can cause tissue damage. Plumbum (Pb) can enter through the respiratory tract, gastrointestinal and skin surface. Plumbum will accumulate on the hard and soft tissues. Repeatedly exposure plumbum can cause damage to body organs and even result in death. The purpose of this study is to look at the protective effect of vitamin C on the liver cause Plumbum exposure which given in rise time within the prevention of liver damage. This research is an experimental study on 25 experimental animal male mice, healthy, which weight are 20-25 gram. Experimental animal were divided into 5 groups, each group consist of 5 mice are: P0 as a negative control were given distilled water. P1 as a positive control with the administration of Pb acetate 20mg/kgBB/days/peroral. P2 vitamin C 200mg/kgBB/days/peroral. P3 vitamin C 500mg/kgBB/days/peroral. P4 vitamin C administered 1000mg/kgBB/days/peroral sonde within 7 days in a row. And group P2, P3 and P4 exposed to Pb acetate at day 7, exactly at one hour after giving the vitamin C. Then an euthanasia for histopathological examination of the liver as well as liver damage microscopically will be done. The data obtained were analyzed with One Way Anova. The results show damage to the liver tissue which exposed by Pb without the protection by vitamin C. And vitamin C can protect the liver from Pb harm to the liver.

Keyword: Vitamin C, Plumbum asetat (Pb), male mice (mus musculus)