الدوار الوقائي المحتمل لمادة الكارينين ضد التأثيرات السامة للمرض الحمى الصفراء في الفئران

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المسؤول العربي

استخدم الدراسة الحالية بدراسة الدور الوقائي لمادة الكارينين ضد التأثيرات السامة للمرض الحمى الصفراء في الفئران من خلال التغيرات في أوزان الجسم والأيض، وفي قياسات الدم والبراز والبراز في الخلايا والأيض، والبراز في خلايا AChE وLDH وALT وALP وLDH والبراز "استعرض" في تكاثر الأنسجة المضادة للكارينين ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT ALT 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Abstract

Focused on the current study examining the preventive role of a substance carnitine against the toxic effects of the Insecticide cypermethrin in mice by changes in the weights of body and organ in the measurements of blood and organ in the protein content of the liver and the brain and study the changes in enzyme AST, ALT, ACP, ALP, LDH and AChE in the plasma, liver and brain. Also study changes in the concentration of materials free radicals TBARS and antioxidant enzymes SOD, GST, GSH, SH plasma, liver and brain. And study the histological changes in the liver and the brain using light and electron microscopes. Experience has been that long (30 days) animals divided into six groups: control group fed through a feeding tube oral corn oil and high-dose group cypermethrin HD fed 2.8 mg / kg of a substance and a cypermethrin LD fed low-dose 0.82 mg / kg of material cypermethrin and a carnitine LC fed 200 mg / kg of carnitine and a carnitine with high dose of cypermethrin HD + LC fed 200 mg/kg carnitine and 2.8 mg / kg Cypermethrin and a carnitine with low-dose of cypermethrin LD+LC fed 200 mg / kg carnitine and 0.82 mg / kg Cypermethrin. The results of the study and a significant decrease in the weights of the animals end of the experiment and compared beginning of the experiment between HD and LD and the control group. While there has been a significant increase in HD+LC and LD+LC, and a significant increase in liver weight and the lack of significant difference in brain weight of HD and LD and an improvement in group HD+LC and LD+LC. The group of LC did not happen change. The results showed a significant decrease in protein content of the liver and brain in a range of HD and LD. While a significant increase occurred in HD+LC and LD+LC did not change happen in a LC. The results showed a significant increase in red blood cells and hemoglobin and hematocrit and a significant increase in white blood cells in a range of HD and LD has been an improvement in measurements of blood in a HD+LC and LD+LC, while no change in LC compared to controls. The results show in HD and LD group a significant decrease in protein and total globulin and a significant increase in albumin / globulin, while the group has improved HD+LC and LD+LC, abumin did not record significant difference. The results also showed a significant increase in the concentration of glucose and bilirubin in the plasma with a HD and LD, while after the addition of carnitine to Cypermethrin significant decrease occurred in a HD+LC and LD+LC. The results showed also a significant decrease in plasma lipoproteins in the TL, Cho, TG, VLDL and LDL and a significant increase in HDL in the HD and LD group, while it has improved after the addition of carnitine to Cypermethrin. The results showed a significant difference in the activities of the enzymes AST, ALT, ACP, ALP, LDH and AChE in the plasma, liver and brain in a range of HD and LD, while an improvement in the concentration of enzymes in a HD+LC and LD+LC compared to the control group, the group of carnitine was not out of change. The results showed a significant increase in the activities of TBARS and a significant reduction of the enzyme antioxidant SOD, GST, GSH and SH in the plasma, liver and brain (enzyme SOD record a significant increase in the plasma) in a range of HD and LD, while in group HD+LC and LD+LC has improved in the concentration of enzymes compared to controls, and the carnitine group was not out of change. Showed a microscopic examination of liver tissue in group HD Hepatocytes suffering from death with a local inflammatory cells and the occurrence of compression sinusoids. The results of the electron microscope it was noted hepatocytes contain a nucleus with nuclear envelope and zigzag decomposition of chromatin nucleus. In the LD was observed to suffer from emphysema hepatocytes hydrobidegeneration cytoplazem, and the nuclei of cells suffers from the degradation of chromatin. In HD+LC hepatocytes appeared normal and contain megakaryocytes. The cell contains a two sinusoids kupfer. The electron microscope images showed areas of low electron density hepatocytes as a result of glycogen depletion, and the nucleus with little chromatin. In LD+LC hepatocytes appeared normal with the presence of inflammatory cells. Also showed the results of examination of brain tissue in the HD layer decomposition of Purkinje cells and replaced, microglia cells and electron microscope images showed a nerve cell body shrunken with an increase in electron density. The LD decay showed neurons and gathering of inflammatory cells and Purkinje cells appear shrunken and replaced (Gilia cells). In HD+LC and observed a large number of neurons in some way become a shrinking of the death-place with a microglia cells. The electron microscope images showed a small-sized neurons with a microglia cells. In LD+LC observed lack of improvement in the form of Purkinje cells, which began atrophic, and granule cells are few and far between, While there is no change in the LC group all groups in the study.