Effect of pollen extract (Cernitin™) on the course of poisoning with organic solvents

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The aim of the study has been to experimentally estimate the chronic exposure of selected biochemical parameters of serum and microsomal level fraction in animals to a mixture of organic solvents. An attempt was made to alleviate the eventual changes by applying Cernitin ™ preparation. The experiment was performed on male rats, Wistar strain. The rats were exposed to the organic solvents in a toxicological chamber with controlled parameters. Cernitin ™ preparation was added to standard diet, being given to the animals in the form of balls. The biochemical investigations were carried out after a lapse of 3 and 6 month exposition. The range of the accomplished studies included: activity of enzymes (AspAT, AIAT, AP, ChE) bilirubin level and lipids content in blood serum. Lipids content was determined in liver homogenate. The content of protein, cholesterol, phospholipids and free fatty acids, was studied in liver microsomes. It has been shown that protracted exposure to the mixture of organic solvents elicits an increase in the activity of the studied aminotransferases and alkaline phosphatase, as well as a decrease in the activity of cholesterase. The changes in activity are accompanied by a rise in the content of lipids. Cernitin ™ preparation used prophylactically normalizes impairments affecting the studied enzymatic and lipid parameters.

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