THE INFLUENCE OF MEVESEL ON THE ACTIVITY OF PROOXIDANT-ANTIOXIDANT SYSTEMS OF CALVES ORGANISM UNDER CONDITIONS OF CHRONIC CADMIUM TOXICOSIS

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The article deals with the results of studies of the effect of cadmium chloride on the indices and non-enzymatic system of antioxidant defense in young cattle, namely on the activity of catalase, superoxide dismutase, vitamins A and E and the intensity of lipid peroxidation. It is established that feeding of calves given at a dose of toxicant 0.05 mg / kg of body weight the activity of catalase, superoxide dismutase, glutathione peroxidase, glutathione levels, vitamins A and E in the blood of experimental animals throughout the experiment was reduced.

The lowest indices of antioxidant system in the blood of young cattle it was found on the twenty fourth day of the experiment, which is originated connected from the enhanced activation processes of lipid peroxidation and an imbalance dysfunction between the activity of the antioxidant system and lipid intensity of peroxide oxidation.

By the condition of the cadmium loading, young cattle were fed with a new integrated complex preparation with antioxidant action «Mevesel» consisting of sodium selenite, vitamin E, and methionine. We found out stimulating effect of the drug on the activity of antioxidant protection. In particular, the significant increase was determined in the activity of catalase, superoxide dismutase , vitamin A and vitamin E in the blood of young cattle, which carried cadmium stress. Established reducing the intermediate and final products of lipid peroxidation, diene conjugates and malonic dialdehyde.

These indicated changes are due to complex components of drug action «Mevesel», which leads to normalization of metabolic and free radical processes in the calves organism. The obtained results of the studies indicate antioxidant action of «Mevesel» in its using of young cattle and the validity of its input to improve the antioxidant status of the organism in chronic cadmium toxicosis.

Keywords: PHARMACOLOGY, TOXICOLOGY, BULLS, ANTIOXIDANT SYSTEM, «MEVESEL», VITAMIN E, VITAMIN A, CATALASE, SUPEROXIDE DISMUTASE, LIPID PEROXIDATION.