

INFLUENCE OF «BIOTONE» FOR BIOCHEMICAL INDICES OF BLOOD AND MORPHOLOGICAL STRUCTURE OF INTERNAL ORGANS OF RATS

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Compliance with the preclinical and clinical trials of veterinary medicinal products that meets international requirements is a key pledge to develop effective, safe and competitive drugs.

The purpose of our work was to determine the parameters of safety and pharmacological action of the drug «Biotone» for multiple administration to laboratory animals.

The article presents the results of biochemical and histological studies obtained in the study of toxicity of the new veterinary preparation immunomodulatory effect «Biotone», with immunomodulatory effect which contains a complex biologically active substance from mushrooms-endophytes *Cylindrocarpon Magnusianum* metabolism abstracted from Ginseng root. The study of subacute toxicity of the drug «Biotone» was performed on male rats, with a body weight of 170-180 g, formed in two groups of 30 rats in each: I group (control) – received water; II group was given an oral preparation «Biotone» at a rate of 170 mg / kg of body weight of the rat. At 15, 30, and 60 days of the experiment, 10 animals from each group were decapitated, under conditions of light ethereal anesthesia, blood was taken for laboratory examination and a complete pathologoanatomic section was performed, and the weight factors of the internal organs were determined with the material fetch for the histological examination.

It was establish that the use of the drug «Biotone», in rats did not cause macroscopic and microscopic changes in tissues and internal organs on the 15 and 30 day of the experiment. However, its administration for 60 days led to an increase in serum creatinine content, activity of the enzymes ALAT, ASAT and ALP, the concentration of medium molecular peptides and decrease in urea, and histologically noted the presence of granular and vacuolar degeneration in hepatocytes, epithelial cells in the renal, focal serous-catarrrhal enteritis, indicating on structural and functional disorders in the internal organs of the animals under study.

Keywords: BIOTONE, IMUNOMODULYATORI, RATS, SUBACUTE TOXICITY, BIOCHEMICAL INDEXES, INTERNAL ORGANS, MORPHOLOGICAL INVESTIGATIONS.