

Microscopic structure of liver dogs and rabbits which have been grown in conventional clean and radioactively contaminated areas

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One of the main trends in modern veterinary medicine is morphology. The relevance of this trend is the integrated study of the general investigation of the structure and functional state of animals in norm, pathology and after the effects on the body of various environmental factors.

Global environmental catastrophe is the accident at the Chernobyl nuclear power plant, which led to the emission of large quantities of radionuclides which contaminated the territory of our environment. First of all, to the negative impact of radionuclides exposed the digestive organs, known as nutritional path of radionuclides into the body.

An important place among morphological studies take morphometric methods which allow to study the structural and functional elements of tissues. Proven the high efficiency of organometric and morphometric studies. Indicators of the morphological changes during the pathology are the basis for clinical veterinary medicine.

However, their morphofunctional characteristics in dogs and rabbits which have been grown in radioactively contaminated areas still not illuminated. Therefore, the aim of our study was to assess the morphological characterization of organs and tissues in dogs and rabbits which have been bred in the 3rd zone of radioactive contamination.

The peculiarities of the histological structure and morphometric parameters of liver of sexually mature dogs and rabbits at the tissue and cellular levels in norm and under the influence of long radiating loading have been given in the article using the complex research. It has been established that macro- and microscopic structure of the studied liver has similar cytostructure inherent in other species of farm animals and have characteristic morphological peculiarities for these species. However, the obtained results confirm that the long-term effect of low doses of ionising radiation causes changes in histostructure of liver of dogs and rabbits.