MORPHOLOGICAL CHANGES OF DOG'S LIVER UNDER ACUTE COURSE OF BABESIOSIS

KOVALCHUK I.

The paper deals with the pathological and anatomic changes, microscopic structure and morphometric parameters of liver in dogs under acute course of babesiosis.

During parasites pathogen B. canis the metabolic processes are happened in the organism of sick animal, which effects negatively on nervous, cardiovascular, digestive and excretory systems. It results intoxication, that is shown in the progress of inflammatory and degenerative changes in the organs and tissues resulting reduce resistance.

Liver is the basic organ where neutralization of toxic substances and neutralization of microorganisms happens.

The paper determines significant increase in 2,12 times absolute and in 1,5 times relative weight of liver; on body surface – dot hemorrhages, in some places – anemic plot; flabby structure, cut - wet.

The microscopic changes in liver are presented by atrophy and necrosis of hepatocytes (part of them are in the state of granular dystrophy), swelling of interlobular connective tissue, discomplexion hepatic beams, local hemorrhages and overflow blood capillaries, bile ducts which are expanded and full of bile.

Was determined significant increase ($p < 0,001$)of hepatocytes by volume in 3,1 times and significant decrease ($p < 0,001$) of nuclei by volume in 1,4 times comparing with clinically healthy dogs. Nucleus cytoplasmic ratio is the informative indices of morphofunctional state of the cells. A decrease of CCR is noticed in times comparing with analogic indices in controlling animals. The paper analyses the hypostructure of liver and focuses on increase of cross section of the central vein in 1,2 times in sick for babesiosis animals, that teshefies blood supply considerable.

Babesiosis, dogs, liver, histological research, morphometric research, CCR, hepatocytes