MICROSCOPIC CHANGES IN THE CONVOLUTED TUBULES OF HENS KIDNEYS AT THE EGG DROP SYNDROME

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Pathological changes by the egg drop syndrome have not been fully examined. In the available world literature, we have found only a few original works devoted to the study of this issue. Only chickens' ovaritis, oviduct atrophy, splenomegaly and a different pathology of the forming of the egg were observed in these works. Postmortem changes in the other organs have not been descripted.

Our objective was an ascertainment of microscopic changes in the convoluted tubules of the chickens' kidneys by the egg drop syndrome. Postmortem examination of 28 chickens that have died or have been rejected in the consequence of EDS, and 8 reference clinically normal chickens was implemented by partial evisceration in standard succession [2].

Presented the results of study of microscopic changes in the convoluted tubules of hens kidneys at the egg drop syndrome. It is set that in the convoluted tubules of kidneys at this illness is registered expressed microscopic changes, first of all the grain dystrophy of ephithelial cells and the presence of basophilic inclusion-bodies in the nuclei of many such cells. The last testifies about the replication of virus in epitheliocytes of the convoluted tubules of hens kidneys.

Hens, egg drop syndrome, kidneys, convoluted tubules, microscopic changes, basophilic inclusion-bodies.

For histological examination, we have sampled pieces of different organs, fixated them in 10% neutral buffered formalin, then dehydrated them by ethanol with rising concentration. After that we have saturated the pieces with paraffin via chloroform, and then using the sledge microtome gotten microscopic sections of 7 – 9 micron thickness. The sections have been covered with Carazzi's hematoxylin and eosin [1].

By the chickens' egg drop syndrome, the clearly marked microscopic changes in the kidney's convoluted tubules are recorded, first of all, the cloudy degeneration of the epithelial cells.

In the nuclei of many epithelial cells of the kidney's convoluted tubules, have been registered the basophilic inclusion bodies, which indicates the replication of pathogenic agents in them.