

HISTOLOGICAL AND ULTRASTRUCTURAL DESCRIPTION OF RATS LIVER DURING THE INFLUENCE OF ANTICANCER DRUGS

G. I. Kotsyumbas, G. I. Blishch

Chemotherapy has become a very common trend in humane oncology medicine and more often it is used by veterinarians for treating of various types of tumors in dogs and cats as before and after the surgical removal of the tumor.

Today use cytostatic, cytotoxic drugs or combination of these drugs (specific drugs have synthetic or natural origin), which have worked well in humane medicine. Preferably, all anticancer drugs that exist today are palliative, but the main treatment is surgical removal combined with chemotherapy. In Lviv Medical University at the Department of pharmacological chemistry were synthesized new chemotherapy drugs with cytotoxic actions that passes preclinical investigation.

An important role during the studying the impact of chemotherapy drugs with cytotoxic effect on the body are postmortem investigation which is a necessary step in determining the biological response of animals to the action of the drug. Liver, occupying a central place in the regulation of metabolism, linking the dockside and general circulation, plays an important role in the removal of toxic products which produced or enter the body by different ways. Is known that any cytotoxic chemotherapeutic agent is able to disturb the histostructure of an organ.

The results of histological and ultrastructural studies of rats liver during the introduction of doxorubicin and newly synthesized anticancer drugs are presented.

In the liver of rats of all experimental groups noted the proliferation of the bile ducts cells in the region of triads, growth in the number of peroxisomes in cytoplasm, moderate expansion of intercellular bile capillaries, indicating the intensification of detoxification processes. Reparative processes were most intense in the liver of rats which were exposed to doxorubicin, and somewhat slower which were exposed to drug 3833 and weakly – to drug 3882.