«Agribusiness, Environmental Engineering and Biotechnologies»
AGRITECH-2019

«Experimental Model of Toxic Hepatitis on Rabbits»

O.A. Gracheva, A.E. Pugatina, M.G.Zukhrabov, D.R.Amirov, B.F. Tamimdarov
Problem statement

• At present, the number of experimental models of liver lesion is rather great. However, absence of standardized reproducible experimental models makes comparative assessment of multiple studies of drug efficacy much more difficult and in a number of cases puts forecasting achievement of an effect in doubt.
Solution methods

- As the object for modeling toxic lesion liver, rabbits of Bely Velikan breed weighting 2.3-2.5kg and aged 3 months were used. The animals were kept in the vivarium environment with natural light conditions on standard diet [10] in compliance with the European Convention for Protection of Vertebrate Animals Used for Experiments or Other Scientific Purposes and code of laboratory practice during pre-clinical trials in RF. Modeling of acute liver lesion was carried out by intraperitoneal administration of 50 % CCl4 (tetrachloromethane) olive oil solution based on 1 ml per kg of body mass twice a week.
Conclusions

- Thus, the investigations performed indicate possibility of using the method described by us for creation of an experimental tetrachloromethane model of toxic lesion of liver in rabbits. Development of toxic hepatitis as early as day 5 of experiment was supported with hematological data characterizing functional insufficiency of liver, and with results of additional functional examinations.

Fig. Rabbit of experimental group, liver. Stained with Ehrlich’s hematoxylin, water-based eosin, lens X20.
Contacts

O.A. Gracheva, A.E. Pugatina, M.G. Zukhrabov, D.R. Amirov, B.F. Tamimdarov

Kazan State Academy of Veterinary Medicine named after E.N. Bauman,
Kazan, Russia

E-mail: gracheva-oa@mail.ru