

INFLUENCE OF EXTRACTIONS OF RUTA, ARTICHOKE, BUPLEURUM AND SALSOLA COLLINA UPON THE INDEXES OF PEROXIDATION OF RATS' LIPIDS ON THE BACKGROUND OF CCL₄ ACTION

Houari Samyer, Naboka O.I., Glushchenko A.V.

National University of Pharmacy, Kharkiv, Ukraine

Issue of a medicinal liver injury becomes more actual recently. First of all, it connects with the fact that most of medicinal preparations widely used by people are dispensing without receipt in Pharmacies network. 1000 preparations approximately can cause an acute medicinal liver injuries, above 200 from them are potentially toxic. According to the pharmacoepidemiological study the average of acute medicinal liver injuries equals 4,2-5,3% of all side effects. Sulphanilamids are such medicines. Thereby pharmacological science pays a deep attention to the search for new effective and harmless preparations with a hepatoprotective action.

The aim of this research was an experimental study of antioxidative and hepatoprotective characteristics of herbal extractions of Ruta, Artichoke, Bupleurum and Salsola Collina on the model of tetrachlormethane hepatitis for rats.

Materials and methods. The experimental studies were carried out according to the bioethical requirements on mature white rats with the weight 180-200 gr.. The model of an oxidative stress was run by intraperitoneal injection of the 25% oily solution of CCL₄ to the experimental animals. The herbal extractions were given by preventive mode into stomach in the range of dosage 0,2-0,5 ml/100 gr. of body weight of animals.

Results and discussions. The hepatoprotective action of the studied original herbal extracts was revealed. While an acute toxic hepatitis caused by tetrachlormethane, they are detecting an antioxidative and membranoprotective effects. These effects are confirmed by reducing of ALT and AST activities, content of crude bilirubine in blood serum, final and intermediate products of the lipid peroxidation, decreasing of risk of glutathione-dependent enzymes' activity. The phytoextracts usage allows to reduce an impaired homeostasis, structure and integrity of the membranes of hepatocytes, to inhibit lipids peroxidation as one of the links of hepatitis pathogenesis, to stimulate and antioxidative protection, biligenesis and biliary excretion, to activate reparative processes of the liver tissue.

Outputs. The profilactic injection of herbal extractions of Ruta, Artichoke, Bupleurum and Salsola Collina to white rats on the backgrounds of an antioxidative stress goes with a hepatoprotective effect which was more obvious while application of the extracts of Bupleurum and Artichoke.