

THE STUDY OF ANTI-INFLAMMATORY PROPERTIES OF THE PLUM LEAVES EXTRACT

Medhauz Iliass, Senyuk I. V.

National University of Pharmacy, Kharkiv, Ukraine

citochrom@gmail.com

Introduction. Scientific researches in the field of creation of new anti-inflammatory medications are held constantly, but the range of these medications is still relatively limited. The emphasis in recent times on the choice of the objectives for a research is given to the biologically active compounds obtained from some plant materials. We are interested in plums, especially its leaves, which is rich in phytochemicals compositions. At the Department of Chemistry of Natural Compounds of the National University of Pharmacy has received the extract from the plums leaves and identified the presence of a diverse group of flavonoids, which have unlimited spectrum of a biological activity. Therefore, we have chosen the study of anti-inflammatory properties. **Aim.** Evaluation of anti-inflammatory activity of the plum leaves extract has begun with the study of the effects of the studying extract on the development of carrageenan foot edema among rats.

Materials and methods. The animals of the control group has been subplantary injected with 0.1 ml of 1% solution of carrageenan to the aponeurosis of a hind limb. The animals of the second and third groups have been intragastrically injected with the investigational extract at a dose of 25 mg / kg and Silibor at a dose of 25 mg / kg, respectively. The animals of the fourth group have been injected with Ortofen at a dose of 8 mg / kg. The degree of edema has been assessed three hours later after the carrageenan injection. We are aware of the fact that in the pathogenesis of carrageenan inflammation in 1.5-5.5 hours after the phlogogene injection the prostaglandins play a leading role, this leads to the conclusion about the impact of the studying substance on the cyclooxygenase system. As comparison medications we have used Ortofen at a dose of 8 mg / kg, and gepatoprotector Silibor at a dose of 25 mg / kg.

Results and discussion. The studies have shown that the studying extract has shown a modest anti-inflammatory activity and reduced swelling value at 25.1%, trailing in terms of expressiveness to the antiexudative action of Ortofen. Silibor has not shown any significant effects on the intensity of the inflammatory process.