IN VIVO STUDY OF HOW SOME SALVIA OFFICINALIS EXTRACTS AFFECT DIURESIS IN RATS

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Introduction. In medical practice non-steroid anti-inflammatory drugs (NSAIDs) used for pharmacotherapy of pain syndrome of different genesis, for treatment of various inflammatory diseases.

NSAIDs have many side effects such as nausea, ulcerations, hepatic and kidney toxicity, etc. As an alternative to NSAIDs, it is possible to consider herbal preparations, in particular, salvia officinalis, as in folk medicine and in dentistry it is used for the prevention and treatment of inflammatory diseases.

Purpose of the study: to investigate how complex of phenolic compounds with argenin (extract 1), polysaccharide complex (extract 2), cleared complex (extract 3), saponin complex (extract 4) affect diuresis in rats.

Materials and methods: the effect on diuresis in rats was studied by the method of Berkhin E.B. White nonlinear rats weighing 130-160 g were used 6 animals in the study groups and in the control group. Doses of 10, 20, 50, 70 mg/kg were studied in the form of fine water suspension which was introduced by a catheter into the stomach of animals. Diuresis was assessed after 2 and 4 hours as a percentage to the control (0%).

Results: extract 1 in dosage 10 mg/kg after 4 hours appeared to have antidiuretic activity – 30% to the control, in dosage 20 mg/kg – 22%, 50 mg/kg – 7%, 70 mg/kg -13%, extract 2 in dosage 10 mg/kg after 4 hours appeared to have antidiuretic activity -30%, to the control, in dosage 20 mg/kg -26%, 50 mg/kg – 21%, 70 mg/kg – 20%, extract 3 in dosage 10 mg/kg had antidiuretic activity – 29%, 20 mg/kg – 28%, 50 mg/kg – 16%, 70 mg/kg -13%, extract 4 in dosage 10 mg/kg had antidiuretic activity – 16%, 20 mg/kg – 9%, 50 mg/kg 11%, 70 mg/kg – 13%.

Conclusions: The effect of salvia officinalis extracts on diuresis in rats was studied. Most of the results showed that all the extracts appeared to have antidiuretic effect in rats. Extract 1 and 2 in doses 10 mg/kg showed most expressed antidiuretic activity.