

INVESTIGATION OF THE HYPOTENSIVE ACTIVITY OF SCUTELLARIA ISCANDERI L. HERBAL TINCTURE.

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The genus Scutellaria (Scutellaria) from the family Lamiaceae (Clearweed) is very numerous and has a wide range. Due to various geographical and climatic conditions, Uzbekistan is the richest region of concentration of medicinal plants. The object of the study is a plant of Scutellaria Iscanderi L., harvested during the flowering phase. The presence in the plants of this kind of potent biologically active substances makes them potentially useful for use in medical and pharmaceutical practice as an antihypertensive, sedative, soothing, anti-inflammatory and blood-restoring agent. Therefore, carrying out studies on the study of Scutellaria Iscanderi L., determining their pharmacological action, including the hypotensive activity, with the aim of creating new medicines on their basis, is an urgent task. The criterion for evaluating the hypotensive activity was the decrease in blood pressure in intact animals, after the administration of the drug[1].. The results were processed by the method of variation statistics by the Student's test.

Objective of research. The aim of this work is to study the antihypertensive activity of the herbal tincture Scutellaria Iscanderi L.

Method of research. The study of the antihypertensive activity of the drug was carried out according to a generally accepted technique based on the ability of the drug to lower normal blood pressure in intact animals [1]. The experiments were carried out on rabbits. As a reference preparation was used "Hawthorn tincture" LLC "Galenika" Uzbekistan. The de-alkalization of the tincture was carried out in the same manner as the tested preparation. The preparations were administered intraperitoneally, in the form of a de-alcoholized solution, after preliminary registration of normal blood pressure. Tested groups №1, №2, №3 - the animals received the tincture of Scutellaria Iscanderi at a dose of 2 ml/kg; a dose of 3 ml/kg; a dose of 4 ml/kg respectively. Reference group - the animals received the preparation "Hawthorn tincture" LLC "Galenika" Uzbekistan, in a dose of 3 ml/kg. After the administration of the drugs, observation was made for 2 hours, with changes in blood pressure recorded every 15 minutes. The results were processed by the method of variation statistics by the Student's test for $P = 0.05$ [2]. The tables show the average arithmetic meanings (M), the corresponding standard errors of the mean value (m), the Student's criterion (t), the number of samples (n).

Results. According to the results of measurement of systemic arterial pressure, it was ascertained (Table 1) that when a subject is administered a drug in a dose of 2

ml/kg, a significant reduction in blood pressure is observed at 60, 75 minutes of observation. When the test subject is administered a dose of 3 ml / kg, a significant reduction in blood pressure is observed at 30, 45, 60, 75, 90, 105, 120 minutes of observation. When the tested preparation is injected with a dose of 4 ml/kg, a significant reduction in blood pressure is observed at 60, 75, 90, 105, 120 minutes of observation. With the introduction of the reference preparation, a significant decrease in blood pressure was observed at 60, 75, 90, 105, 120 minutes of observation.

Table 1

Results of measurement, dynamics of changes in systemic arterial pressure, in the study of antihypertensive activity of drugs (mm Hg)(M±tm; p=0,05; n=6)

Steps of measuring blood pressure	"Scutellaria Iscanderi" tincture			"Hawthorn tincture" in a dose of 3 ml/kg.
	in dose of 2 ml/kg	in dose of 3 ml/kg	in dose of 4 ml/kg	
Before experiment	93,17	95,50	91,67	92,267
After 15 min.	91,33	88,67	88,83	91,67
After 30 min.	88,33	83,83	85,83	88,00
After 45 min.	84,67	80,50	83,33	85,50
After 60 min.	82,17	75,83	80,67	82,00
After 75 min.	83,00	75,83	78,83	77,67
After 90 min.	86,33	75,50	80,00	77,17
After 105 min.	88,33	78,67	80,67	77,50
After 120 min.	88,67	80,50	82,50	77,83

The obtained results indicate the presence of reliable hypotensive activity in the drug "Scutellaria Iscanderi" tincture. The highest activity is observed when a dose of 3 ml/kg is administered. If we compare the blood pressure values of the tested drug, they are comparable with the arterial pressure indices of the reference preparation. However, the fact that the tested preparation at a dose of 3 ml/kg has a significant effect on blood pressure reduction at 30 minutes, and the reference drug significantly reduces arterial pressure at 60 minutes, makes the tested preparation more active in terms of the hypotensive activity than the reference preparation.

Conclusion. The hypotensive activity of the drug "Scutellaria Iscanderi" tincture, "UzCPI" Uzbekistan (developer) was investigated, the results of which showed the presence of reliable hypotensive activity. When comparing the tested drug with the reference drug, it was found that the drug "Scutellaria Iscanderi" tincture has greater antihypertensive activity than the reference preparation.

References:

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