

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

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Plants of the genus Scutellaria from the family Scutellaria Lamiaceae are one of the promising sources of raw materials for the preparation of drugs with different biological activity. The chemical composition of plants of the genus Scutellaria L. is diverse and represented by phenolic acids, iridoids, di- and triterpene compounds cardenolides, coumarins, tannins and flavonoids. Among a variety of classes of natural compounds, notably the group of polyphenols, due to abnormally high content and their considerable structural diversity. On the territory of the Republic of Uzbekistan grows such kind of Scutellaria genus, as Scutellaria iscanderi L. The Central Asian species of the Scutellaria are poorly studied. Therefore, carrying out studies on the study of the most common types of Scutellaria in Uzbekistan, determining their pharmacological action with the aim of creating new medicines on their basis, is an urgent task. In connection with this, the purpose of this study is to investigate the sedative activity of the herbal tincture Scutellaria Iscanderi L. Experiment was conducted to determine the effect of Scutellaria Iskanderi's tincture on the sleep duration caused by 1% Nembutal solution. The results were processed by the method of variation statistics by the Student's test.

Objective of research. The aim of the study is to study the sedative activity of a tincture obtained from the aerial part of the plant Scutellaria Iscanderi L.

Method of research. *The sedative activity of the drug was studied by the ability of sedatives to prolong sleep [3]. In this case, experiment was conducted to determine the effect of Scutellaria Iskanderi's tincture on the sleep duration caused by 1% Nembutal solution [1]. Experiments were carried out on 30 white mongrel mice (both sexes) weighing 18-22 g, followed by a grouping of 6 animals each. As a reference preparation was used "Tincture of the Motherwort" LLC "Galenika" Uzbekistan. The de-alkalization of the tincture was carried out in the same manner as the tested preparation. Preparations were administered orally once and daily in the form of a solution, for five days. Control group (control) - animals orally received purified water, in a volume of 0.3 ml/20 g. Tested groups №1, №2, №3 - animals received "Scutellaria Iskanderi" tincture, "UzCPI" Uzbekistan (developer), in a dose of 5 ml/kg, in a volume of 0.1 ml/20 g; in a dose of 10 ml/kg, in a volume of 0.2 ml/20 g; in a dose of 15 ml/kg, in a volume of 0.3 ml/20 g. respectively. Reference group - the animals received the drug "Tincture of the motherwort" LLC "Galenika" Uzbekistan, at a dose of 15 ml/kg, in a volume of 0.3 ml/20 g. Thirty minutes after the last administration of the drugs, the animals of all groups were given Nembutal*

in the form of a 1% solution once intraperitoneally at a dose of 40 mg/kg (0.04 ml/10 g of body weight). The effectiveness criterion is a decrease in the latent time of falling a sleep (min) and an increase in the duration of sleep (min). 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), the confidence limits (the lower confidence limit ÷ the upper confidence limit).

Results.

($M \pm tm$; $p=0.05$; $n=6$)

Group name	Latent sleep time (min)	Duration of sleep (min)
Control	12,83 (10,06÷15,60)	124,17 (112,01÷136,32)
“Scutellaria Iscanderi” tincture, dose of 5 ml/kg	6,33 (4,62÷8,05)	213,33 (158,70÷267,97)
“Scutellaria Iscanderi” tincture, dose of 10 ml/kg	6,17 (4,36÷7,97)	234,67 (191,46÷277,88)
“Scutellaria Iscanderi” tincture, dose of 15 ml/kg	5,50 (4,05÷6,95)	288,17 (246,64÷329,69)
"Tincture of the motherwort" LLC "Galenika" Uzbekistan	6,00 (4,52÷7,48)	185,50 (163,54÷207,46)

Conclusion. The obtained results indicate the presence of reliable sedative activity in the drug "Scutellaria *Iskanderi*" tincture, "UzCPI" Uzbekistan (developer). The highest activity is observed when a dose of 15 ml/kg is administered. If we compare the indices of the latent time of falling asleep of the tested drug and the reference drug, then it turns out that they are comparable. However, when comparing the duration of sleep of the tested drug with the reference drug, it appears that in all three doses, significantly greater activity is observed than in the reference preparation. The sedative activity of Scutellaria *Iskanderi* tincture was studied, UzCPI Uzbekistan (developer), the results of which showed the presence of reliable sedative activity. When comparing the tested drug with the reference drug, the presence in Scutellaria *Iskanderi* tincture was found to be more sedative than the reference preparation.

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