STUDY OF THE ANTIPYRETIC ACTION OF DRY EXTRACT RHEUM TATARICUM L.

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Relevance. Herbal preparations are multicomponent, have different mechanisms of action and do not have side effects on the body. Based on this, we studied the pharmacological activity of the dry extract of Rheum Tataricum L. on experimental models .

Objective: To study the antipyretic effect of dry extract of Rheum Tataricum L.

Materials and methods. The antipyretic activity of the samples was assessed using the generally accepted method on 15 white mice (both sexes) weighing 19-22 g, followed by division into groups of 5 animals each. A 20% suspension of baker's yeast in physiological solution was used as a pyrogen, at a dose of 4000 mg/kg, in a volume of 0.2 ml/10 g.

For this purpose, animals of all groups were preliminarily given daily oral administration of samples at a dose of 250 mg/kg for 6 days. On the 7th day of the experiment, the animals' initial body temperature was recorded, after which pyrogen was injected subcutaneously into the cervical fold. Then, the animals' body temperature was recorded hourly for 4 hours. After achieving a pronounced thermal reaction (in our case, at the 1st hour of observation), the animals were given a single oral administration of the studied samples at a dose of 250 mg/kg (within 10 minutes of recording the temperature). The animals were divided into the following groups: 1. control group (control) – animals with test modeling, but without exposure to samples; 2. "Rheum Tataricum L" – animals received dry extract at a dose of 250 mg/kg, in a volume of 0.2 ml/20 g; 3. "Biomol" - the animals received "Biomol" capsules "Shrey Nutraceuticals & Herbals Pvt. Ltd.", India at a dose of 250 mg/kg in a volume of 0.2 ml/20 g of body weight. Body temperature was recorded orally with an electronic thermometer (with an accuracy of 0.1 0C).

Results of the study. During the experiment, it was found that after the introduction of pyrogen, a significant increase in the body temperature of animals was observed in the first hour of observation. The studies showed that the dry extract of Rheum Tataricum L and capsules of Biomol (Shrey Nutraceuticals & Herbals Pvt. Ltd., India) did not have a pronounced antipyretic effect in animals with induced hyperthermia. The data obtained indicate that these samples did not reduce body temperature under these experimental conditions and, accordingly, did not show reliable antipyretic activity.

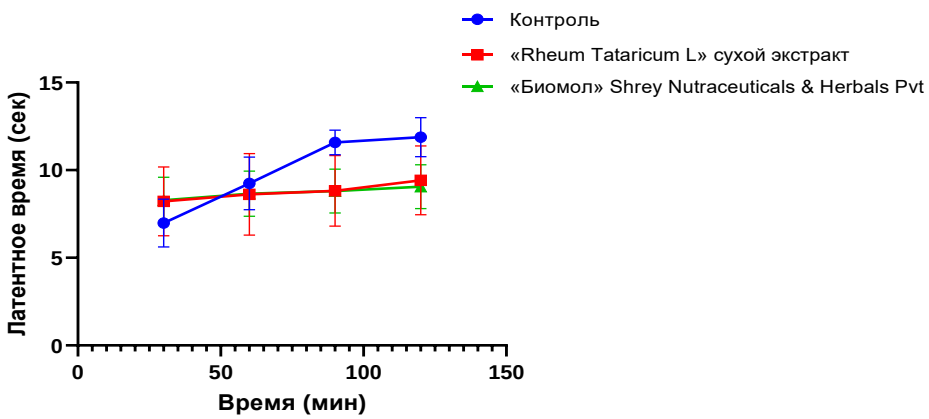

Figure 5. Results of the study of the antipyretic activity of the dry extract of "Rheum Tataricum L", (M□SD; p=0.05; n=5)

Conclusion. In the model of pyrogen-induced hyperthermia, the dry extract of Rheum Tataricum L and capsules of Biomol did not cause a significant decrease in body temperature in animals. Compared with the control group, no reliable antipyretic effect was found. Therefore, the samples do not have pronounced antipyretic activity under the conditions studied.