



STUDY OF THE ALLERGIC AND CUMULATIVE EFFECTS OF A HERBAL TEA MADE FROM A CICHORIUM INTYBUS PLANT

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Relevance: One of the priority tasks in the field of pharmaceuticals is to provide the population of our republic with effective and safe medicinal products and biologically active supplements (BAS) derived from local plants.

Objective: To study the allergic and cumulative effects of the herbal tea made from the (*Cichorium intybus*) plant.

Materials and Methods: Experiments to study the allergic effects of the herbal tea made from the common desert plant (*Cichorium intybus*) were conducted on 36 white rats of both sexes, weighing 165–170 g, using the method of V. A. Ado. To induce hypersensitivity in the rats, a 0.5–1 ml/kg subcutaneous injection of chicken egg white solution diluted in physiological saline (1:5 ratio) was administered three times at two-day intervals. Simultaneously, 0.1 ml of vaseline oil was injected. On the 21st day of sensitization, a 1 ml/kg dose of chicken egg white protein was injected intraperitoneally.

The control group received an equivalent volume of distilled water. The test animals were given the herbal tea in the form of an infusion at doses of 10 and 20 ml/kg for 10 days. The cumulative properties of the herbal tea made from the common desert plant (*Cichorium intybus*) were studied on 24 rats of both sexes, weighing 150–160 g. The herbal tea was administered orally: 10 ml/kg for the first 4 days, 15 ml/kg for the next 4 days, 20 ml/kg from days 9 to 12, and 25 ml/kg for the final 5 days. The control group received an equivalent volume of distilled water. The condition of the animals was monitored visually, with attention given to their general condition, appetite, and response to external stimuli. At the end of the experiment, the animals were euthanized by decapitation, and their internal organs were examined macroscopically.

Experimental Results: The results of studying the allergic effect were as follows: in the control group of animals that received the appropriate volume of distilled water, signs of anaphylaxis were observed. These included increased and shallow breathing, decreased skeletal muscle tone, impaired coordination of movements, and signs of restlessness. In the experimental groups, where animals received the herbal tea made from the common desert plant (*Cichorium intybus*) at doses of 10 and 20 ml/kg, these changes were significantly reduced compared to the control group and were not clearly observed. Thus, the studied herbal tea does not exhibit allergenic effects. According to the results of the cumulative effect study, no significant differences in body weight were observed between the experimental and control groups of animals. The mucous membranes and skin of all animals remained unchanged. All animals had a satisfactory appetite and consumed the same amount of food and water. Respiratory function remained normal across all groups, and no cases of diarrhea were observed in any of the animals. At the end of the experiment, macroscopic examination of the internal organs showed a normal appearance. No visual changes were detected in the internal organs of rats from either the experimental or control groups. Thus, the herbal tea does not exhibit cumulative effects.



Conclusion. The herbal tea prepared from *Cichorium intybus* does not exhibit allergic or cumulative effects in experimental animals at the studied doses.