

## **STUDY OF ANALGETIC ACTIVITY EXPRESSED BY THE THICK EXTRACT OF COMMON TANSY FLOWER**

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Pain is a manifestation of many pathological processes. Therefore, pharmacological pain therapy is an urgent medical and social task. To solve this problem, pain relievers are used, which have a number of dangerous side effects. This necessitates the search for alternative means of pain relief.

Among other pharmacological effects, common tansy (*Tanacetum vulgare* L.) has anti-inflammatory and antispasmodic effects. The aim of this study was experimental confirmation of the analgesic activity of a common tansy flower thick extract on models of thermal and chemical pain irritation. The model "hot plate" is mainly characterized by the central mechanism of pain formation, and for the model "acetic acid cramps" - peripheral. The model of thermal stimulation "hot plate" was reproduced on white outbred male rats, and the model of chemical stimulation "acetic acid cramps" - on white outbred male mice. All manipulations were carried out in accordance with the provisions of the "European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes". Evaluation of the research results was carried out using a package of standard statistical programs; for all types of statistical analysis, differences were considered significant at  $p < 0.05$ .

The results of the study showed that in the first hour of observation the animals in the "hot plate" model, the common tansy flowers thick extract showed an activity that during this period is comparable to the same of the reference drug metamizole sodium. And in its turn the peak of the analgesic activity of the reference drugs diclofenac sodium and metamizole sodium falls on 2 hours of observation the animals in the "hot plate" model. Common tansy flowers thick extract shows moderate but persistent analgesic activity in 1 h, 2 h and 3 h after its administration to animals – that is, throughout the entire time of the experiment.

The analysis of the test data "acetic acid cramps" indicates that common tansy flowers thick extract also exhibits a reliable analgesic effect, slightly inferior to the reference drug. Thus, in both groups there were animals that did not have the manifestation of cramps.

Evaluating the results of the conducted pharmacological studies of the antinociceptive action of common tansy flowers thick extract in general, we can conclude that peripheral and central mechanisms are involved in its implementation. The data obtained are an experimental justification for the further study of common tansy flowers thick extract as a promising analgesic agent.