



STUDY OF THE ANTIPROLIFERATIVE ACTIVITY OF A DRY EXTRACT PREPARED FROM THE AERIAL PART OF THE LOCAL LOPHANTHUS ANISATUS BENTH

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Inflammation is a complex reaction of the body as a whole, has a protective-adaptive nature and is formed in the process of evolution, expressed mainly by local tissue changes - alteration, exudation, caused by impaired local circulation, emigration and proliferation of leukocytes. In folk medicine, anise lofant is used for inflammatory processes of the respiratory organs, bronchitis, to improve the immune system, for gastritis, hepatitis, gastrointestinal disorders, as a strengthening and anti-aging agent.

Purpose of the study. Study of the antiproliferative activity of a dry extract prepared from the aerial part of the local lofanthus anise (developed at the Department of Pharmacognosy of Tash.Pharm.MI) in comparison with the drug "Insti" produced by Herbion Pakistan (Pvt) Ltd , in an experiment on white rats.

Material and methods. The antiproliferative activity of the dry extract " Lofant " was studied on mature white male rats with an initial weight of 160-200 g, kept under standard vivarium conditions, quarantined for at least 12-14 days. Each experimental group consisted of 6 animals.

The antiproliferative phase of inflammation in the "cotton granuloma" model was created by implanting a sterile cotton swab (weighing 10 mg) in white rats under the skin of the back between the shoulder blades. The operation was performed under aseptic conditions under general anesthesia (urethane at a dose of 1 mg/kg). Animals of the first and second experimental groups were intragastrically administered the test substances at doses of 250 mg/kg on the day of surgery and for the next seven days, once before meals . Control animals received drinking water in the appropriate volume. 24 hours after the last administration of drugs (on the eighth day), the animals were killed under general anesthesia and cotton balls with granulation tissue formed around them were removed, weighed on an electronic scale (MWP1200H CasCorporation , South Korea) and dried at a temperature of 60°C to constant weight. The degree of the proliferative phase was judged by the difference between the weight of the dried granuloma and the initial weight of the ball. The exudative reaction was assessed by the difference between the masses of wet and dried granulomas.

Research results. Dry extract of "Lofant" suppresses the exudation process by 31.8% compared to the control group.

A study of the mass of dry granuloma showed that when using the dry extract " Lofant " the mass of dry granuloma was significantly less by 1.8 times, and in the group of animals that were administered the drug " Insti " produced by Herbion Pakistan (Pvt) Ltd - 1.5 times. Therefore, the dry extract " Lofant " has antiproliferative effects.

Conclusion. An experimental study of the dry extract " Lofant ", developed at the Department of Pharmacognosy of TashPharmI , showed that the dry extract has antiproliferative activity.