DEVELOPMENT OF COMPOSITION, TECHNOLOGY AND STUDY OF ACUTE TOXICITY OF COMBINED COMPOSITION ON THE BASIS OF PLANT RAW MATERIAL FOR TREATMENT OF CLIMATIC SYNDROME

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Introduction. The main stage in the development of drugs for the treatment of climacteric syndrome is the technology of manufacturing the drug. Medicinal herb collection has the following plant material: linden, clover, thyme and daisies.The research of acute toxicity is a compulsory research stage of new drugs and active substances that allows us to assess the health hazards of substances in short-term exposure and allows us to determine the toxicity class and the breadth of therapeutic action.

Aim. To research acute toxicity of decoction of the combined composition on the basis of plant material for the treatment of climacteric syndrome for further pharmacological studies.

Materials and methods. The research was conducted on 60 white outbreeded rats in males and females with body weight of 200-220 g. Before the study, the animals were divided into groups of 6 animals in each. Animals were deprived of food 24 hours before the introduction of drugs. The introduction of drugs was carried out in the morning on the nose. After oral administration of the test samples, the animals were kept for an additional 4 hours without food with free access to water.

Results and discussion. Indicators of animal body weight dynamics, which were administered the test samples by enteral and parenteral routes, did not exceed the limits of the physiological norm and probably did not differ from similar indices in the group of intact animals throughout the experiment.

Conclusions. Therefore, the complex of conducted research on the acute toxicity of drops decoction of the combined composition on the basis of plant material in rats allowed to establish the absence of toxic effects of drugs with parenteral (LD50> 1000 mg / kg) and enteral (LD50> 5000 mg / kg) input paths. According to the classification of substances for toxicity, the decoction of the combined composition also refers to the IV class of toxicity substances in the two investigated injections. Since no animal was found to be killed in an experimental study, subsequent studies with higher doses are not feasible. In the study of the state of internal organs, the toxic effects of the investigational drugs are also not established.

FEATURES OF THE THERAPEUTIC SCHEME OF ASCARIDOSIS TREATMENT IN KAZAKHSTAN

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Introduction. The current problem of parasitic diseases affects all segments of the population in all countries of the world. Helminthiases of digestive system are the most common among the countries of the Eurasian continent. Ascaridosis is found everywhere among adults and children, because it requires special attention and ways of solution.

Aim. In order to study and compare approaches to the treatment of ascaridosis in different countries, we studied the protocol of diagnosis and treatment of ascaridosis in adults in Kazakhstan.

Materials and methods. The subject of the study was the “Clinical protocol of diagnosis and treatment of ascaridosis in adults”, Republic of Kazakhstan, approved in 2015.

Results and discussion. According to the protocol, treatment objectives:

- ✓ elimination of *Ascaris lumbricoides*;
- ✓ relief of clinical symptoms;
- ✓ prevention of progression of the pathological process caused by the disease;
- ✓ prevention of complications;
- ✓ prevention of the formation of residual events, recurrent and chronic course of the disease.

The tactic of treatment provides that all patients are treated with anthelmintic medicines. With prolonged and intensive infestation, pathogenetic and symptomatic therapy is performed to stop intoxication, allergic manifestations, dyspeptic disorders. Further follow-up is carried out at the level of the infectious diseases department of polyclinics or helminth cabinet/center in hospitals for 3 months with a control study of feces for the presence of ascaris eggs. If the treatment is ineffective, the treatment should be repeated.

Additionally, bed rest for a period of acute process and diet (table number 4, if the function of the digestive tract is impaired; table number 15 with normal functioning of the digestive tract) is recommended.

Conclusion. The studied scheme of treatment of ascaridosis corresponds to the general trends in the treatment of this disease, recommended by WHO. For the purpose of conducting a comparative analysis of the regimens of ascaridosis treatment, it is planned to study the relevant protocols of Ukraine and other countries.

DEVELOPMENT OF COMPOSITION AND TECHNOLOGY OF COMBINED LIQUID MEDICINE FOR TREATMENT OF HYPERKERATOSIS

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Introduction. Hyperkeratosis of the skin is the consequence and cause of the occurrence of many concomitant diseases and is not an independent disease. Elimination of the epithelium is one of the mechanisms of natural skin protection and normally it goes unnoticed. With pathology, the cells of the stratum corneum of the epidermis begin to be severely divided and do not have time to get rid of, which leads to thickening of the skin, the appearance of scales and peeling, superficial and deep cracks, blockage of the sebaceous glands, folliculitis, and the possible addition of concomitant infection. Often accompanied by pain, the appearance of the skin becomes unhealthy, the quality of human life worsens.

Drugs for the treatment of dermatological diseases associated with the occurrence of hyperkeratosis, aimed at combating pathogenic microflora, peeling, softening the skin, slowing the separation of cells of the epidermis. In most, they provide a drying action, contain alcohol that is not always suitable for sensitive dry skin prone to atopy.

Preparations of industrial production do not allow to fully consider the peculiarities of the patient and to individually approach his treatment. Thus, it is impossible to treat hyperkeratosis of the face and feet by means of the same concentration of keratolytic components. The auxiliary components of medicines very often cause irritation of the already injured skin, leading to the thinning of the vascular wall, which can eventually lead to permanent recurrence of hyperkeratosis.

Aim. Development of the composition and technology of the new extemporaneous complex medicinal product for the treatment of hyperkeratosis.

Materials and methods. When developing the composition of the drug, we selected the following active pharmaceutical ingredients (APhI): azelaic acid, salicylic acid, urea, D-panthenol, menthol, oil solution of vitamin A, and corn oil. Polysorbate-20 and polysorbate-80 were used to form a stable emulsion.

Results and discussion. According to the analysis of medicinal products existing in the pharmaceutical market, one can conclude that there are practically no expensive medical products of industrial production, and ethanol is most often included in the formulation of extemporaneous preparations.

For many years, the traditional keratolytic agent of extemporaneous drugs is salicylic acid, but recently preparations based on azelaic acid, and especially its combination with other acids and retinoids, are in great demand. The substance normalizes the process of keratinization in the follicles of the sebaceous glands, promotes their purification, has antimicrobial activity, antioxidant and anti-inflammatory action, etc.