

**Aim of the study:** Carrying out phytochemical studies of stinkhorn fungus tinctures. The mushroom was harvested by self in July 2018. In the work used freshly picked and dried raw materials. Drying of the fruiting body of the mushroom was carried out in cool conditions at a temperature of (2-8)°C, as at thermal drying the fungus enters the stage of maturity (intensive growth) in which the mushroom according to the literature is conditionally edible. Since mushroom tinctures are prepared in traditional medicine using vodka, it is interesting to note how ethanol strength affects the extraction of BAS.

Tinctures were prepared in the ratio of raw material: the extractant as 1:40 in terms of dry matter, or 1 : 5 without taking into account the moisture content of the mushroom's fruiting body. As the extractants used different concentrations of ethanol – 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%. Tinctures were obtained by maceration (infusion). In the tinctures determined the content of polysaccharides, extractives, identified the main groups of BAS.

**Results.** In the identification of the main groups of BAS in the tinctures using colour reactions have been revealed polysaccharides (Felling reagent, red precipitate), phenolic compounds (iron (III) chloride, brown colour), steroid substances (sulfuric acid, concentrated, pink colour), aminoacids (with ninhydrin, blue-violet colour), nitrogen-containing compounds (alkaloids) (Dragendorff reagent, orange-red colour) and iridoids (Stall reagent, cyan colour).

In determining the number of extractives, it has been found that the maximum extraction ensures the use of ethanol at concentrations of 10%, 20% and 30%. In the case of dry stinkhorn fungus, the number of extractives extracted at ethanol concentrations of 10, 20 and 30% is 2-3 times greater than when using freshly picked mushroom.

When determining the quantitative content of polysaccharides by gravimetric method in raw materials, their content was found to be 12.28%. Comparing this value with polysaccharides of shiitake, maytake, reishi, cordyceps and coriolus fungi, stinkhorn fungus is only inferior to shiitake. When determining the number of polysaccharides in tinctures, it has been found that the maximum content of these substances is 4.0-4.5% at extraction with aqueous-alcoholic solution of 20%, 30% and 40%.

**Conclusions.** The study of the chemical composition of the common stinkhorn fungus (*Phallus impudicus*), the development of substance production technology and the establishment of pharmacological activity is a promising area in the search for new drugs.

## **RELEVANCE OF THE DEVELOPMENT OF A VETERINARY DRUG ANTIHISTAMINE ACTION FOR TREATMENT OF CANINE ATOPIC DERMATITIS**

Horinchoi Y.K.

Scientific supervisors: prof. Yarnykh T.G., as. prof. Pul-Luzan V.V.

National University of Pharmacy, Kharkiv, Ukraine

[pulluzanv@gmail.com](mailto:pulluzanv@gmail.com)

**Introduction.** Atopy is a state of hereditary predisposition to the formation of antibodies (IgE) to environmental allergens. In dogs, atopic dermatitis often occurs between the ages of 1 year and 3x, with 3-15 percent of the population of animals of this species being affected, regardless of gender. Starting treatment of an animal with atopy (dermatitis), you need to remember about the threshold of itching and the summation of irritation. Summing factors are an allergy to flea bites, secondary pyoderma, helminth infections, food allergies. In this regard, it is necessary to influence these summarizing factors. Treatment of atopic dermatitis is one of the most difficult tasks of veterinary dermatology, because this disease is practically impossible to cure. In this situation, it is more appropriate to talk more about state control.

**Aim.** Show the need for the development of new antihistamines for the treatment of atopic dermatitis.

**Materials and methods.** In our work we use materials from articles from scientific journals, non-regular publications, as well as educational literature were used.

**Results and discussion.** Atopic dermatitis is a chronic inflammatory skin lesion. The causes of this disease are dust, pollen, mold. In most cases, young animals aged from several months to three years are sick. Also, in this pathology, there is an inheritance of the gene responsible for the production of IgE, as many studies indicate, but in this case, genetics is not a condition for the onset of the disease. There are several approaches to the treatment of this pathology, one of which is the use of glucocorticosteroids, but since this pathology is chronic and can lead to complications, dogs are advised to use other drugs and methods for treating atopic dermatitis during long-term glucocorticoid therapy. These methods include: replacing glucocorticosteroids with antihistamines. One of these drugs is chloropyramine (suprastin). The mechanism of its action is to block H1-histamine receptors, which leads to a decrease in histamine content, as well as chloropyramine eliminates increased vascular permeability and tissue edema, has antispasmodic and peripheral anticholinergic activity. When applied topically, relieves redness, itching. Side effects of this drug when used in\m and n\o include: drowsiness, vomiting, loss of appetite. When applied topically, systemic effects are not observed.

**Conclusions.** The results of the analysis allow us to recommend an antihistamine drug, namely chloropyramine for the treatment of canine atopic dermatitis. Therefore, it is relevant to develop a line of drugs (for local and oral use) with chloramiramine for the treatment of canine atopic dermatitis.

## **ANALYSIS OF THE SODIUM DICLOFENAC ASSORTMENT ON THE PHARMACEUTICAL MARKET OF UKRAINE**

Ivanova Eu., Kotenko O.

Scientific supervisor: assoc. prof. Chushenko V. M.

National University of Pharmacy, Kharkiv, Ukraine

chushenkovn@gmail.com

**Introduction.** Diclofenac sodium – a synthetic drug, is a derivative of acetic acid. This substance is readily soluble in polar organic solvents. Diclofenac sodium is a non-steroidal drug with pronounced antirheumatic, anti-inflammatory, analgesic and antipyretic properties. A distinctive feature of diclofenac is that it is one of the most potent inhibitors of prostaglandin E2 synthesis. And its ability to suppress COX activity exceeds other non-steroidal anti-inflammatory drugs by 3-1000 times.

**Aim.** Determining the ways and evaluating the prospects of creating new dosage forms of diclofenac, which have still not been presented on the ukrainian market.

**Materials and methods.** Monitoring information of electronic and paper literary sources, systematization, data generalization, logical analysis. The analysis of drugs was carried out according to the following indicators: manufacturer, dosage form, active substance.

**Results and discussion.** When researching the pharmaceutical market as of 01.12.19, 42 drugs were analyzed, which included diclofenac sodium. The nomenclature of medicines is presented in the form of various dosage forms: tablets, capsules, injectable solutions, granules, powders, gels, sprays, eye drops, suppositories and transdermal patches. The largest share is made up of tablets – 39 %. The following percentages were distributed in the following way: injection solutions occupy 14 % and suppositories 14 %, capsules 11 %, gels 9 %, sprays 5 %, powders, granules for oral solution, eye drops, patches 2 % each. It was also established the number registered in Ukraine, manufacturing countries that manufacture drugs based on diclofenac. Segment analysis indicates that the domestic manufacturer represents 26 % of the assortment, 74 % are foreign products. Among all countries-producers of drugs based on diclofenac sodium, Ukraine, Germany and India occupy first places – 14 % each. But on the Ukrainian market there are no certain drugs with diclofenac sodium, such as two-layer suppositories and extemporal suppositories based on cocoa butter by casting.

**Conclusions.** Studies have shown that the production of diclofenac sodium in Ukraine, especially in the form of tablets, occupies a larger percentage than other dosage forms. This gives reason to argue that the preparations of this substance are in great demand in the pharmaceutical market and there is a need to expand this market through extemporaneous formulations.