

complications which include exhaustion, an indisposition, insomnias, hoarseness, bone, muscles pain, perspiration, incontinenes of urine, arrhythmia, spontaneous pneumothorax, etc. that considerably affects immunity and health of the patient.

In practical activities different types of cough meet on the basis of what it is possible to suspect presence of this or that disease: Dry, damp, continuous, spastic, hoarse, whooping cough. So, for example, dry cough is often observed at dry bronchitis, irritation of a throat, pleura, at miliar tuberculosis, at damage of intra chest lymph nodes. Damp cough is noted, as a rule, at bronchitis and pneumonia. That is, there are many types of classification of cough, but the most used in practice there is a classification of cough by such signs: by character: unproductive (dry) and productive (damp); by intensity: tussiculation, easy and strong; by frequency: short-term or paroxysmal and constant; on duration: sharp - up to 3 weeks, subsharp – from 3 to 8 weeks, chronic – more than 8 weeks.

The consequences of coughing can be quite complicated and, even, can lead to hemoptysis, pneumothorax with bullous emphysema, and especially to a decrease in the quality of life of the patient. That is why the choice of adequate antitussive therapy is especially relevant.

Aim. To study the properties and features of medicinal raw materials of certain types of plants, through a series of experiments and studies, to substantiate the composition of a liquid medicinal product for the treatment of respiratory diseases of children and adults.

Results of investigations. To solve the problems posed in the work, we searched, collected and analyzed in detail the literature related to cough therapy based on medicinal herbal raw materials (HRM).

In general, synthetic drugs are used to treat cough in Ukraine. In our view, the development of combined medicines, which will also include complexes of active components of HRM that do not contain synthetic drugs, is relevant. Active pharmaceutical ingredients of HRM, according to the literature, increase the overall and local cellular immunity, after their action in the body remains an immune memory of the pathogen. The immune system of the patient identifies and voluntarily releases into the body the active components of the drug, trusting to penetrate into the most important and responsible places. Due to the fact that the HRM complexes have a healthy bioenergy potential, they will restore the bioenergy of the diseased cell.

At the pharmaceutical market of Ukraine, a wide range of medicines for the treatment of acute respiratory viral infections and cough is available. They are presented in many dosage forms, including species, tablets, syrups, tinctures, drops etc. Among them, the most rational dosage form is mixture, which has many positive properties and which is quite convenient to use in pediatric practice.

Conclusion. It was chosen by us such composition of extemporal medicine on the basis of HRM for treating cough for children and adults. For treatment of cough, it is offered to enter such HR in composition of which are included biologically active agents which show complex pharmacological action, namely: expectorant, secretolytic, anti-inflammatory, enveloping, softening and toning.

Studies have made it possible to choose the composition of the drug in the form of extemporaneous medicine, which consists of marshmallow herb, fennel fruits, leaves of mother and stepmother, violet grass and plantain leaves.

DEVELOPMENT OF A GEL COMPOSITION FOR TREATING HEARTBURN

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Introduction. Heartburn, also referred to as acid reflux, is a painful burning sensation in the chest. It is a symptom of a digestive system problem. Lifestyle changes and over-the-counter medications are used to treat and prevent heartburn. Antacids have been used to treat heartburn for over 2000 years.

Common antacids include carbonic and bicarbonate salts, alkaline aluminum and / or magnesium complexes (e.g., magnesium and aluminum hydroxides), aluminum and magnesium phosphates, and magnesium trisilicate.

Aim. Create a gel composition for treatment heartburn.

Materials and methods. In the course of the work, literature was analyzed to determine the optimal gel composition.

Results and discussion. The main therapeutic advantage of antacids is the speed of their action. Antacids within a few minutes raise the intragastric pH above 3.5 and provide relief from heartburn. The disadvantage of traditional antacids is their relatively short duration of action. Regardless of the chemical composition of antacids, their effect is due to contact neutralization of hydrochloric acid. Bismuth-containing drugs are not antacids. Most drugs contain bismuth subsalicylate as a bismuth salt. Although the mechanism of action of bismuth is not fully understood, bismuth salts can have a local protective effect on the gastric mucosa. Bismuth sulfide formed as a result of taking the drugs turns the stool black. Documented cases of bismuth neurotoxicity with prolonged use of high doses. Alginates are natural substances isolated from brown algae, which have been used in the food, cosmetic and pharmaceutical industries. Alginic acids are polysaccharides whose molecules are built from residues of L-hyaluronic and D-mannuronic acids. Residues of mannuronic acid impart viscosity to alginates. When ingested, salts of alginic acid react with hydrochloric acid in the lumen of the stomach, as a result of which, after a few minutes, a non-absorbable gel barrier is formed. The gel is formed by binding residues of hyaluronic acid with the participation of calcium ions, which "cross-link" the chain of polysaccharides.

Conclusion. The composition of alginate preparations includes sodium bicarbonate, which, when reacted with hydrochloric acid, forms carbon dioxide. Bubbles of carbon dioxide turn the gel into foam. This allows the gel to float on the surface of the contents of the stomach.

THE CHOICE OF AUXILIARY SUBSTANCES FOR THE PRODUCTION OF ORODISPERSIBLE TABLETS WITH MELATONIN

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Introduction. It is generally recognized that a healthy sleep is necessary for the normal functioning of the human body. The quality of sleep can be affected by everyday factors such as stress, depression, and sudden changes in time zones. In the human body, the regulation of sleep rhythms is performed by the hormone melatonin, which is a derivative of serotonin and is released by the epiphysis. The production and secretion of melatonin by the body depends on factors such as room lighting during sleep and daily routine. To eliminate violations of the circadian rhythm of sleep caused by changes in time zones, stress and depressive disorders, as a result of violations of melatonin synthesis by the human body, a synthetic analogue of melatonin is used in the form of tablets.

Aim. Currently, pharmaceutical companies produce melatonin in the form of standard gastro-soluble tablets, which has certain disadvantages, such as a small bioavailability (about 30%) and a long time of onset of therapeutic effect (about 60 minutes). These circumstances led to a detailed study of this drug, namely the choice of auxiliary substances for the creation and further production of orodisperse tablets with melatonin.

Materials and methods. The active substance of the drug melatonin is a crystalline powder easily soluble in water, which allows you to produce the drug in the form of orodisperse tablets. During the research, the selection of auxiliary substances for the production of orodisperse tablets was carried out by the method of hierarchy analysis, which is based on the decomposition of the problem and its