

PHARMACEUTICAL DEVELOPMENT OF OINTMENT FOR COLD DISEASES TREATMENT

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Introduction. Upper respiratory tract diseases, especially in preschool children are the most common. In the complex treatment and prevention of such diseases are often used medications of local external application - different ointments. They exhibit symptomatic treatment that is aimed at eliminating individual symptoms and relief of cold and cough. The main action of these ointments - locally irritating and distracting. Pharmaceutical market in Ukraine is not saturated with such drugs and represented only by foreign products. Therefore, the development of domestic ointment containing menthol, methyl salicylate, terebinthine, eucalyptus oil based on fatty ointment is a topical area of research. Menthol, methyl salicylate and terebinthine oil have reflex vasodilator effect with analgesic effect, irritating and distracting action. Essential oils of eucalyptus and pine needles as part of ointment cold at evaporation penetrate the airways and reveal their inherent properties: antimicrobial, anti-inflammatory and expectorant (reduce the viscosity of mucus and improve expectoration). Therefore the base of this ointment should be fatty with melting temperature equal to the temperature of the human body. Melting at application ensures the release of vapors of essential oils that provides a therapeutic effect.

The aim of the study. Creation of ointment bases composition for use in catarrhal diseases.

Materials and methods. The objects of research were ointment bases manufactured on the basis of solid fat with added sunflower oil and beeswax. Samples were subjected to rheological studies at different temperatures and determined the structural and mechanical properties. Also measured drop point of samples. Rheological studies were performed on rheoviscometer "Rheotest 2" with a set of coaxial cylinders N.

Results. It has been found that ointment consistency with drop point 36 °C has a sample with solid fat content 40%, sunflower oil 40% and beeswax 20%.

Conclusions. Scientifically substantiated ointment base composition for treating colds containing menthol, methyl salicylate, terebinthine oil and essential oils.