

COMPOSITION IMPROVEMENT OF "BRONHOMAX" SYRUP

Popova T. V., Kukhtenko G. P.

National University of Pharmacy, Kharkiv, Ukraine

tanya_popova777@mail.ru

Introduction. Respiratory infections occupy an important place in the structure of human diseases and up to 80% of diseases diagnosed with children. The treatment problem of acute inflammatory diseases of the upper and lower respiratory tract with children remains urgent for modern medicine. Among the numerous assortment of pharmaceutical substances fenspiride hydrochloride deserves special attention, as it has a complex mechanism of influence on a respiratory tract inflammatory process – the histamine effect blocking H₁-receptors, that provides antihistamine, spasmolytic actions of fenspiride on smooth muscles of the bronchi and prevents the development of swelling, reduces passage of nasal mucus and bronchial secretions amount; - anti-inflammatory action, which is the result of inhibition of the formation and secretion of inflammatory factors; - inhibits α₁-adrenergic receptors which stimulate the secretion of viscous mucus. Medicines for the treatment of inflammatory diseases of ENT-organs are manufactured in various officinal forms, but the most common and appropriate for use in pediatric practice are syrups. The problem of treatment of inflammatory respiratory diseases among children and adolescents is complicated by the anamnesis of diabetes. Physicians should choose thoroughly and carefully the medicine for the treatment, which must not contain substances affecting blood glucose levels. Therefore, the improvement of "BronhoMax" syrup (Pharmaceutical company «Zdorovie») by means of removal sugar from the composition is a topical area of the research and will expand the range of application of "BronhoMax" syrup.

Aim. The aim of the research was the replacement of sugar by sweeteners that do not affect blood glucose levels in the composition of "BronhoMax" syrup.

Materials and methods. Fenspirid hydrochloride is a dry white substance with a strong bitter taste. As the taste and scent flavors the following have been used: sorbitol, sucrose, fructose, mannitol, sodium saccharin, stevia, glycyram, glycerol, citric acid, flavors (banana, strawberry, lemon, caramel) and their different combinations. Flavor qualities of the test samples were determined according to the methods by Tentsova A.I. and Egorova I.A. We have performed the research of the sample viscosity, pH and stability.

The results and discussion. Fenspirid hydrochloride has a strong bitter taste, its masking is achieved by using a combination of taste and scent flavors. As a result of the research we have offered a sample of fenspiride hydrochloride syrup based on 70% sorbitol with the addition of stevia, glycyram and glycerol.

Conclusions. Implementation of the improved "BronhoMax" syrup (Pharmaceutical company «Zdorovie») would expand the range of its application and reduce the import dependence of Ukrainian pharmaceutical market.