

REASONING OF CREATING OF NASAL GEL ON A NATURAL MATERIAL

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Relevance: Rhinosinusitis is a bacterial or viral infection, which is accompanied by inflammation of the mucous membrane of the cavity and paranasal sinuses. Despite the large assortment of medicines of industrial production, it is important to development extemporal drugs, because they have several advantages: providing an individual approach to the treatment of patients, the absence of preservatives and stabilizers in theirs composition, accessibility of low cost.

Aim: To analyze the assortment of medicines for the treatment of acute rhinosinusitis. Development of a nasal gel based on natural origin raw materials for the treatment of acute rhinosinusitis.

Results and its discussion. When we analyzing the pharmaceutical market in Ukraine, we was found that the medicine for the treatment of acute rhinitis are classified as ATC-classifier for: sympathomimetics simple drugs (36.2%), sympathomimetics in combination with other substances (except corticosteroids) (13.3%), combined medicines (10.5%), other medicines for the treatment of diseases of the nasal cavity. Among the range of medicines in the form is predominate drops and spray. Soft drugs (in the form of nasal ointment and gel) occupy only 4% of the market. This indicates an little assortment of herbal medicines.

To develop a new extemporal drug we chose nasal gel form , since the gel has a more prolonged action, has a moisturizing effect, thus reducing the likelihood of dryness of the nasal mucosa. As active substance it was used an aloe extract which has antiseptic, antimicrobial effect, increases trophic and tissue regeneration.

As a gelling agent was chosen a carbopol of grade 934 P, which minimum amount of residual solvents and is intended for applications to the mucous membranes. Systems with the necessary viscosity were formed by neutralization of carbopol with trometamol, which, unlike other amino derivatives, is a non-toxic substance. So the selected composition will provide a wide range of pharmacological activity of the developed gel with minimal side effects, which will allow it to be effectively used in the treatment of acute rhinosinusitis, including for children.

Conclusions. It was selected the composition of the extemporal gel, which will make it possible to use for the effective treatment of acute rhinosinusitis.