

that tested in various temperatures. The pH of the aqueous dispersion was determined potentiometrically. The quantitation of the amount of carotenoids was measured on a spectrophotometer.

Results and discussion. For the treatment and prevention of cheilitis the cream which includes the biologically active substance – the lipophilic complex of bee pollen – is proposed. The technology of the cream with lipophilic complex of bee pollen was developed, thermo- and colloidal stability was studied. Studies are continuing to determine the shelf life of the cream.

Conclusions. The composition of the cream with lipophilic complex of bee pollen for treatment and prevention of cheilitis was experimentally substantiated.

JUSTIFICATION OF THE COMPOSITION OF SUPPOSITORIES OF REPARATIVE ACTION

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Introduction. Currently, there is an increase in the number of diseases of childbearing age women. Cervical erosion is not an exception to the total number of diseases. The urgency of research on the development of medicinal products for the treatment of this pathology is due to statistics, namely, according to the World Health Organization in 2014, this disease was found in 40% of the total female population. Moreover, 64% of the total number of cases of this disease were diagnosed in women of optimal childbearing age (18 to 25 years old). Erosion of the cervix in medicine is included in the category of precancerous diseases, in this regard, it requires close attention and mandatory medication.

There are many ways to treat cervical diseases. The choice of technique depends on the severity of the process and many other factors. It is also necessary to treat concomitant inflammatory processes. Because of the variety of reasons for the pathology occurrence universal schemes and drugs do not exist.

Based on the literature research on the aetiology and pathogenesis of cervical erosion, dexpanthenol and chlorhexidine bigluconate have been selected as active pharmaceutical ingredients. The combination of these substances will provide a comprehensive reparative, anti-inflammatory and antiseptic effect on the pathological process.

Aim of the study. To carry out research on the justification of composition for suppositories containing dexpanthenol and chlorhexidine bigluconate.

Materials and methods. Taking into account the physicochemical properties of dexpanthenol and chlorhexidine bigluconate, it is expedient to use a hydrophilic macrogol suppository base (a mixture of macrogols 400 and 1500).

Concentration of chlorhexidine bigluconate in all samples was 0.016 g, the concentration of dexpanthenol in the preparation Depanthol – 0.1 g.

Results. Developing suppositories based on macrogols 400 and 1500 is to determine the ratio of these substances. Usually, as a suppository basis, the "working" ratio of macrogols 1500: macrogol 400 as 95: 5 is used, but active components can significantly affect the quality of suppositories. Therefore, the main task of performing experimental studies was to determine the concentrations of macrogols 1500 and 400. For this purpose, model samples were developed and their physicochemical, rheological and biopharmaceutical properties were investigated. The quality of the suppositories was evaluated in appearance, time of disintegration, hardening temperature. Investigating the dehydrating properties of suppositories, it has been found that samples exhibit high osmotic (dehydrating) properties (over 700% for 12 hours of experiment). By the sum of quality indicators, all samples can be used for further biopharmaceutical research.

In the technology of suppositories manufacturing temperature factor plays an important role. To determine this parameter, rheological studies were performed using a rheoviscometer. From the analysis of the rheological behaviour of the suppository mass, depending on the temperature, the temperature of the suppository mass preparation was determined – 46-48 ° C. Mixing speed – 45 rpm.

Conclusions. A complex of pharmaceutical studies has been carried out on the development of the composition of reparative and antibacterial action suppositories.