

URGENCY OF CREATION DERMATOLOGICAL OINTMENT FOR TREATING DIAPER DERMATITIS

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Introduction. Diaper dermatitis is caused by overhydration of the skin, maceration, prolonged contact with urine and feces, retained diaper soaps, and topical preparations and is a prototypical example of irritant contact dermatitis. Signs and symptoms are restricted in most individuals to the area covered by diapers.

Diaper dermatitis commonly affects infants, with peak incidence occurring when the individual is aged 9-12 months. One study determined that at any given time, diaper dermatitis is prevalent in 7-35% of the infant population.

Urgency of this problem is defined not only by the continued growth of said disease, but by the inconsistency in evaluating different pathogenetic mechanisms of its development and, consequently, not always effective treatment results of existing medicines.

Aim is theoretical substantiation of active substances' choice for creation a new dermatological ointment for diaper dermatitis treatment.

Results and discussion. In terms of pharmacological properties most promising for use in the form of ointments with anti-inflammatory, anti-allergic and antimicrobial activity are medicinal herbs such as licorice root, grass herd, rosehip oil and essential oils of chamomile and tea tree. Extemporaneous prescriptions of ointments containing these plant components widely used in dermatological practice.

Extemporaneous ointments with chosen natural substances today prepare on the petrolatum base. For preparation ointments with these components on emulsion bases there are no data on the compatibility of the components, rational technology and stability.

In terms of the above and considering the rules of extemporaneous ointments preparation, we have developed composition of emulsion ointment with licorice root, essential oils of chamomile and tea tree, and its extemporaneous technology.

All these natural components have anti-inflammatory and anti-allergic properties due to their chemical composition (flavonoids, polysaccharides, triterpene saponins, sugars, etc.). The components of our proposed ointment emulsion base (corn oil, beeswax, emulsifier and hydrophilic phase) and their concentrations were determined based on rheological, osmotic and biopharmaceutical research.

Conclusions. Proposed ointment with licorice root, essential oils of chamomile and tea tree is promising for use as a medicine for the treatment of diaper dermatitis.