

THE DEVELOPMENT OF A DRUG FOR THE TREATMENT OF ATOPIC DERMATITIS

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Atopic dermatitis (AD) is a chronic inflammatory disease of the skin of the allergic nature, which is characterized by dryness, reddening, rash and itch. AD is considered to be a children's disease – 65% of little patients with such diagnosis symptoms develop before the age of 1 year, 90% – at the age of 5 years, in rare cases, AD remains for the rest of all life. The wrong treatment of atopic dermatitis not only doesn't give to the patient relief, but also aggravates the course of a disease.

Local treatment of AD is an obligatory and important part of a complex treatment. Its goal is not only the preclusion of inflammation and itch, but also restoration of a water and lipidic layer and barrier function of the skin.

The aim of our work is the develop of a soft drug composition of moisturizing, anti-inflammatory, antimicrobial, reparative and antipruritic action for the treatment of atopic dermatitis. For this purpose as active pharmaceutical ingredients, we recommend to include into the developed soft drug the dry extract of green tea and D-panthenol (provitamin B5).

Green tea extract is considered as one of the most effective plant remedies for the prevention and treatment of skin diseases. Due to the complex effect of polyphenols, catechins and antioxidants the extract possess a good penetrating ability that allows biologically active substances to influence on the deeper layers of the epidermis, thus providing antibacterial, antiseptic, antifungal, anti-inflammatory, calming and antipruritic actions. Besides that, the green tea extract improves oxygen and water-salt exchange, moistens the skin, removes reddening and irritation, and also stimulates a regeneration.

D-panthenol has epithelizing, wound healing and anti-inflammatory effect, that determined its addition into the composition of the developed medicine for the treatment of atopic dermatitis.

The aim of our further work is exploring the physical-chemical and technological properties of the active ingredients, and also the choice of a rational basis, the kind of which affects the degree of release and absorption of the active ingredients from a soft dosage form, so and on getting a given pharmacological action.