

JUSTIFICATION OF THE CREAM COMPOSITION FOR SYMPTOMATIC TREATMENT OF PSORIASIS

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Introduction. Psoriasis in all its various clinical manifestations is the most common chronic inflammatory disease of the skin. The prevalence of psoriasis in the population ranges from 1 to 5 % and depends on the climatic and geographical region of residence and ethnic characteristics of the population. Psoriasis is equally common in both men and women.

The existing range of drugs for psoriasis treatment mainly includes hormonal drugs. Such drugs have many contraindications and side effects.

Aim. Thus, the urgent task of pharmaceutical science is to develop a domestic drug to relieve psoriasis symptoms based on a combination of herbal substances, which is the purpose of our work.

Materials and methods. The objects of the study were plant extracts of industrial production, purified water, emulsifiers, wheat germ oil, sea buckthorn oil, vitamins A and E, sunflower oil, salicylic acid, cocoa butter. These ingredients meet the requirements of the State Pharmacopoeia of Ukraine. The quality of the samples obtained was evaluated by organoleptic parameters over time.

Results and discussion. Studies of the literature data on the main approaches to the pharmacotherapy of psoriasis and the analysis of folk medicine allowed choosing the initial composition of active substances that are potentially effective in the treatment of major dermatological symptoms of psoriasis (Table 1).

Table 1. Composition of model samples

Ingredient	Sample 1	Sample 2	Sample 3
Licorice extract (dry)	-	-	0.1
Licorice extract*	5 drops	5 drops	-
Sophora extract*	5 drops	5 drops	5 drops
Celandine extract*	5 drops	5 drops	5 drops
Chamomile extract*	5 drops	5 drops	5 drops
Hypericum extract*	5 drops	5 drops	5 drops
Elecampane extract*	5 drops	5 drops	5 drops
Herd Extract *	5 drops	5 drops	5 drops
Salicylic acid	0.1	0.2	0.2
Sea buckthorn oil	3 drops	3 drops	2 drops
Vitamin A	3 drops	2 drops	2 drops
Vitamin E	3 drops	2 drops	2 drops
Cacao butter	0.2	0.2	0.2
Wheat germ oil	5.0	3.0	3.0
Emulsifier "Montana"	3.0	-	-
Emulsifier "Emulpharma 1000"	-	2.5	3.0
Sunflower oil	15.0	17.0	17.0
Purified water	28 ml	27.5 ml	27 ml

*Note. Water-glycerol extracts were used.

The samples were prepared according to the rules of preparation of emulsion creams: cocoa butter was melted together with the emulsifier; the oil-soluble substances were dissolved in a mixture of oils before the formation of the emulsion system; the extracts were mixed with a part of purified water and added to the finished emulsion cream.

Samples 1 and 2 are light brown, homogeneous, with a specific odor. Sample 3 is yellow, homogeneous, with a slight specific odor.

The condition of the emulsion creams obtained was studied in time. Samples 1 and 2 were found to be homogeneous, but their consistency was poor (too liquid). Sample 3 has the best organoleptic properties and a nice creamy consistency, does not leak when applied.

Conclusions. Based on the results of studies of three samples of creams, the sample 3 is optimal. Thus, it was found that the emulsifier "Emulpharma 1000" provides the best organoleptic characteristics of the cream. Also, the use of dry extract of licorice root allowed increasing its amount in the composition of the cream, which presumably leads to a better therapeutic effect.

Sample 3 was chosen for the further research on the development of cream to relieve the dermatological symptoms of psoriasis and the laying of its samples to study the stability of the drug.