

JUSTIFICATION OF MEDICINE COMPOSITION FOR CORRECTION OF AGE-RELATED SKIN PROCESSES

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Introduction. Ageing is a very difficult process that takes place in every cell of the body, and ageing of the skin is only a consequence of the manifestations of this process. Skin ageing can be influenced by internal (heredity, stress, endotoxycosis, associated with the pathology of internal organs, dysfunctions of immune and hormonal systems, etc.) and external factors (ultraviolet radiation, adverse ecology, allergens, smoking, alcohol, malaise, mechanical damage, toxic substances of cosmetics, etc.). According to the Danish scientists findings conducted on twins, genetic factors cause skin ageing in only 25 %, while 75 % is the result of unfavourable factors. Depending on the prevalence of certain exogenous and endogenous factors G. E. Pierard identifies 7 types of skin ageing: chronological (time is the determining factor); genetic (anomalies in DNA reparation); actinic (ultraviolet and infrared radiation); domestic (tobacco, alcohol, drugs); catabolic (attendant diseases and chronic infections); endocrine (hormonal dysfunction); mechanical (gravitational stress). Despite the availability of assortment of medicines only few of them show a complex effect.

Aim. The purpose of the study is to justify the composition of the cream to correct age-related skin changes.

Materials and methods. Vegetable oils, emulsifiers, emulsion bases, a complex of biologically active substances were used as the objects of research. Organoleptic, physico-chemical, rheological indicators were investigated during the developing of cream composition.

Results and discussion. Based on the results of the study of organoleptic, physico-chemical, rheological properties and consumer characteristics of model samples of base, a composition, which includes a complex of oils – olive, grape seeds, emulsifiers oleate and stearate PEG 400, MHD and CSA, dipropylene glycol and purified water, is proposed. On the basis of the analysis of literature data and compositions of remedies with similar effects, substances of damping, biogen-stimulating, protective, antioxidant action were chosen. They are hyaluronic acid, placenta extract, vitamins A and E, essential oils of orange and cinnamon bark.

Conclusions. According to the results of experimental work, there was developed an emulsion base and biologically active substances chosen for the composition of the cream to correct age-related changes.