THE ELEBORATION OF THE DOSAGE FORMS WITH CHONDROPROTECTIVE EFFECT

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Diseases of the musculoskeletal system are one of the most pressing health and social problems of the world because of their high prevalence, significant disability and invalidity, the difficulty of early diagnosis and treatment of patients. Among the diseases of the musculoskeletal system the most frequently diagnosed one is osteoarthritis that affects up to 20 % of the population of our planet. The degradation occurs in osteoarthritis cartilage tissue, which is manifested above all the destruction of proteoglycan complexes with subsequent dehydration of the cartilage. It significantly modifies the metabolism, reducing synthesis of the main molecules - proteoglycans and collagen type II. Therefore, based on the pathogenetic prerequisites for effective pharmacotherapies the inflammatory reaction and pain to normalize the metabolism of the cartilage are suppressed.

Nowadays we use the symptomatic medicine of fast action, which include analgesics, non-steroidal anti-inflammatory drugs, corticosteroids. As well as symptomatic there are slow-acting drugs - chondroprotective funds, which include glucosamine, chondroitin, diacerein, piaskledin, alflutol, hyaluronic acid. Glucosamine is a monosaccharide, which is the precursor of many glycosaminoglycans such as chondroitin sulfate, kerotan sulfate, hyaluronan. In the development of pharmaceutical dosage the forms with transdermal effect gave special attention to not only active, but also auxiliary substances. It is known that there is a complex interaction between them that induces considered auxiliary substances as an inert carrier of drugs, as well as an important means to maximize the therapeutic effect. The properties of the base must be confirmed with the purpose of destination ointment. The basis for the surface action of the chondroprotective ointments, on the contrary, should not be able to be absorbed without disturbing the local action of the cure ointment at the same time.

Some special requirements, which have a significant impact on the stability and kinetics of the drug, have been established, such as: the pharmacological indifference, the lack of effects of chemical and physical incompatibility, the stability of physical and chemical properties in the manufacture of ointments and storage, the ability to set limits to release the active ingredients, the ability to be easily removed from the skin.

The object of our work is to study the interaction of support and the active ingredients in pharmaceutical dosage forms of chondroprotective drugs, and the design and composition of the search and technological methods that can provide the high quality of the resulting product with the optimal therapeutic efficacy.