

USING OF MODERN EXCIPIENTS FOR DEVELOPING OF SOFT MEDICINES.

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Developing of effective drugs involves use of a wide range of excipients with various pharmaceutical properties. Excipients influence the pharmacological activity of the drugs, increase the efficiency, stability and shelf-life and affect the manufacturing processes. Excipients help to develop and produce pharmaceutical systems with suitable physical, chemical and therapeutic properties.

Today, the actual task of pharmaceutical science is to develop effective soft drugs for external use - ointments, creams, gels, pastes and liniments. For the manufacturing of modern pharmaceutical dosage forms technologists use different excipients, each of those plays different roles in composition: bases (lanolin, petrolatum, silicone), solvents (mineral and vegetable oils, ethyl and isopropyl alcohol, propylene glycol, glycerin, dimethyl sulfoxide, collagen), enhancer of penetration, antimicrobial preservatives (benzalkonium chloride, chlorhexidine, miramistin, benzyl alcohol), osmotically active agents, lubricants, emulsifiers (sodium lauryl sulfate, Twins, Sola higher fatty acids, ethoxylated oil, cholesterol, Spencer), thickeners, antioxidants (tocopherol, ascorbic acid, citric acid) etc.

Excipients are the active components of the ointment which promote bioavailability of active ingredients. Excipients must meet medical prescription of drugs and be used in biologically harmless and compatible with body tissues they should not have allergic or toxic effects and interact with drugs. Also they should be cheap.

Emulsifiers (surfactants synthetic and semi-synthetic origin) play the important role in the production of ointments. Today, the modern market offers a wide range of emulsifiers to create ointments of emulsion type: Eumulgin B1, B2, B3, HRE-60, Cutina E 24 (nonionic surfactants for creams and emulsion oil / water), Generol R (emulsifier for emulsion water / oil), Dehymuls SML (lipophilic emulsifier for pharmaceutical emulsions).

Based on the above mentioned, we should notice that using of modern excipients is very actual for regulation and improving of pharmacological, technological and consumer properties of new effective drugs for topical application at stage of its developing.