

DEVELOPMENT OF EXTEMPORAL OINTMENT WITH AZITHROMYCIN FOR THE TREATMENT OF LOCAL INFLAMMATORY PROCESSES

Akum Lora

Scientific supervisor: associate prof. Rukhmakova O. A.

National University of Pharmacy, Kharkiv, Ukraine

rukhmakovaolga@gmail.com

Introduction. Achievements in the field of active management of purulent wounds and inflammatory processes of the skin and mucous membranes do not exclude a known method of their treatment under a bandage that is economically advantageous, applicable in any conditions, attracts by its accessibility, simplicity and remains the main one in practical medicine. Ointments are one of the most common medicinal forms for this pathology. Their assortment is very diverse, but the leading place belongs to the ointments containing antibacterial substances and, in particular, antibiotics. The results of numerous experimental and clinical studies indicate the possibility of increasing the effectiveness of local medicinal treatment by creating new ointments on hydrophilic bases that have a multidirectional effect on the main pathogenetic factors of the wound process.

The aim of our work was to develop extemporal ointment with azithromycin for the treatment of local inflammatory processes.

Materials and methods. To achieve the goal of the research - the development of ointment's technology for the prevention and treatment of local inflammatory diseases of the skin and mucous membranes, and having antimicrobial, dehydrating and wound-healing action - the following medicinal and auxiliary substances were used: azithromycin, chamomile extract, cellulose polymers, polyethylene oxides with a molecular weight of 400 and 1500, an emulsion base and petrolatum in combination with anhydrous lanolin.

Results and discussion. The technology of a multicomponent ointment containing azithromycin in combination with a chamomile extract and a polymer base, an alloy of polyethylene oxides, has been experimentally substantiated and developed. The osmotic activity of the ointment has been established.

The study of the antimicrobial activity of the developed multicomponent ointment against the main pathogens of the purulent-inflammatory process was carried out. It is established that it has a pronounced biocidal activity.

The stability of a multicomponent ointment has been established for physical, physical-chemical and microbiological indices in the course of its long-term storage in ointment glass jars at a temperature of (8-15) °C for 6 months (observation period).

Conclusions. On the basis of the conducted research technology of extemporal liniment of methyluracil for the treatment of wounds was developed.