

THE EXPERIMENTAL INVESTIGATION OF THE NEW OINTMENT WITH AETHONIUM FOR TREATMENT OF THE PURULENT WOUNDS

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Rational treatment of purulent wounds is one of the difficult problems of modern clinical surgery. One of the effective methods of wounds treatment is a local drug treatment using ointments. According to the basic medical and biological requirements for ointments used to treat wounds, they must affect most stages of wound healing process.

The aim of our study was to investigate the antimicrobial, anti-inflammatory and wound healing activity of a new ointment of with aethonium and to compare it with the activity of combination ointments Inflarax and Laevomekol.

The investigation of antimicrobial activity of new ointment with aethonium was conducted in vivo on the model of purulent necrosis process in rats with wound infection caused by (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Candida albicans*). According to the results of experiment it has been established that the ointment with aethonium has an expressed antimicrobial effect, shows the absence of microbial contamination and decrease of the term of healing to 7 days when the reference drugs promotes healing to 5 days as compared with the control pathology group.

The study of anti-inflammatory activity on the model carrageenin-induced edema of rat paw of ointment with aethonium has showed the highest anti-inflammatory effect (33,3 %), exceeding the effect of the ointment Laevomecol (25,1%).

The study of wound healing effect on the model of a linear cut wounds in rats has shown that the ointment with aethonium promotes rapid wound healing and scar formation, its therapeutic effect exceeds effects (172,7 %) of ointments Laevomecol (151,8 %) and Inflarax (54,8 %).

So, according to the results it has been established that the new ointment with aethonium possesses an expressed antimicrobial, anti-inflammatory and wound healing effects and is a perspective subject for further pharmacological investigations in the field of treatment of purulent wounds.