

OINTMENT DEVELOPMENT FOR WOUND HEALING ON NATURE AFI

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Successful treatment of a particular chronic wound requires a detailed understanding of the molecular and cellular components present within each wound. Currently, chronic (and acute) wounds of different etiologies are treated using a multistep approach based on contemporary knowledge of wound healing. First, nonviable tissues from within and around a wound are removed using surgical debridement or debriding agents, such as bacterial collagenase. Second, infection and inflammation are minimized with antibiotics and anti-inflammatory preparations. Next, moisture imbalance is corrected, generally with carefully selected dressings. Finally, epithelialization and granulation tissue formation are promoted by the application of specific therapies, such as growth factors.

The use of time strategy is not always sufficient, however, and some wounds remain nonresponsive to current therapies.

The relevance of medicinal plants and herbs use, especially growing in Ukraine, modern medicine has increased significantly in recent years. Effectiveness of the modern drugs which contains herbal ingredients higher than most of synthetic drugs in terms of complex action exerted by keeping the amount of biologically active substances. Due to the following advantages: low toxicity, hypoallergenic, complex action and the possibility of long-term use without significant side effects it is expedient to use substances derived from medicinal plants. The most common active pharmaceutical ingredients obtaining from medicinal plant materials used for the production of ointments are extracts. Hydrophobic or hydrophilic fractions of extracts are prepared depending on the used extracting agent.

Among the drugs that have active influence on the course of reparative processes hydrophilic fraction of the Poplar Chinese leaves extract of was chosen. This active pharmaceutical ingredients has reparative, antimicrobial, inflammatory activities.

Despite these successes in the treatment of inflammatory processes, including combined ointments, most drugs in Ukraine are more active in the first phase of wound healing, and they has limited range, so creating effective ointments for the treatment of purulent wounds remain relevant, especially containing natural ingredients.