

The expediency of introducing reparative agents into the semi solid medicinal forms

Nasrallah Haider, Kovalev V.V.

The National University of Pharmacy, Kharkiv, Ukraine

volodyakw@gmail.com

An important task of modern pharmacy and medicine is the creation of combined ointments with reparative activity. This is due to the widespread post-operative infectious complications, the emergence of antibiotic-resistant strains, which complicates the effectiveness of the wound treatment, lead to an increase population allergization and poor tolerability of the therapy. One of the ways to solve this problem is to create a combination of medicines for local use with a significant reparative effect. Comprehensive treatment of purulent wounds based on a rational combination of local and general therapy.

Traditional wound healing methods involve re-healing over a relatively long period, often with the formation of large deforming scars, and therefore do not always provide satisfactory functional and cosmetic results. Despite the application of drainage for the wound and using of antibiotics, sometimes reinfection localized in the wound tissues or purulent cavities is possible.

Treatment of purulent necrotic processes should involve the removal of non-viable tissues, inhibition of growth of the microflora, acceleration of the regeneration processes.

Among the drugs that actively affect the course of reparative processes, our attention was attracted by dexpanthenol. Dexpanthenol has the expressed reparative activity and anti-inflammatory effect. This substance is a derivative of pantothenic acid, which is involved in the processes of acetylation in gluconeogenesis, the release of energy from carbohydrates, the synthesis and cleavage of fatty acids, the synthesis of sterols and steroid hormones, acetylcholine and other substances. Dexpanthenol rapidly adsorbed to the skin, converted to pantothenic acid and enters the reserve of endogenous pantothenic acid. The development of wound processes leads to increased necessity of pantothenic acid, and its lack for the skin can be compensate by the local use of dexpanthenol.

As well dexpanthenol exhibits immunomodulatory effect, by stimulating the functional activity of neutrophilic granulates increases tissue resistance, prevents abnormal proliferation and differentiation of fibroblasts with the formation of hypertrophic and keloid scars. Unlike other widespread reparative agents dexpanthenol has no contraindications.

Despite the progress achieved in the suppurative inflammatory processes treatment, including combined ointments, it should be noted that most drugs are most active on the first phase of the wound process, and their nomenclature is limited, so the creation of effective ointments for the wounds treatment with high reparative activity remains relevant.