

RATIONALITY OF DEVELOPING DOMESTIC DRUGS FOR THE TREATMENT OF HYPERTROPHIC SCARS

Yehorova D. S.

Scientific supervisor: Associate Professor,
Doctor of Pharmaceutical Sciences Butko Ia. O.
National University of Pharmacy, Kharkiv, Ukraine
dasha.s.yehorova@gmail.com

Introduction. Postoperative or traumatic wounds often not heal as well as desired, first of all from an aesthetic point of view. The reason for that is most often excessively active work of our body in the regeneration process. Hypertrophic scar appears after excessive formation of fibrous tissue as a result of prolonged inflammation, hypoxia, addition of secondary infection, reduction of local immunological reactions. Skin damage can lead to the appearance of hypertrophic scars. The growth of such a scar begins immediately after healing, characterized by rough scar formation, that rises above the skin level and causes esthetic discomfort. As for today, there are many methods for treating hypertrophic scars: surgical excision(allows to get rid of the expressed hypertrophic scars and replace with more accurate), microdermabrasion (grinding the skin with solid microscopic crystals) and others. However, the method of local treatment of hypertrophic scars remains convenient and cost-effective.

Aim. The purpose of this work is to study the rationality of developing domestic drugs for local treatment of hypertrophic scars.

Materials and methods. Investigating necessity of developing new drugs for the local treatment of hypertrophic scars, analysis of the modern pharmaceutical market in Ukraine was held on the following parameters: assortment, manufacturer, pharmacological effects, dosage form and the price.

Result and discussion. Recent research has shown that 5 drugs are registered on the market. All preparations of foreign production: USA – «Advanced Bio-Techologies» (Kelo-cote), Russia – the firm "SPb-Technology" (Fermenkol), Holland – company «ICN Pharmaceuticals Holland BV» (Dermatix), Germany - the German companies "Polytech Health & Aesthetics" (MEDGEL) and "Merz Pharma" (Contractubex).

The presented drugs have an emollient, remodeling, antiproliferative and anti-inflammatory effect, destroys pathological collagen and hyaluronic acid until they become molecules of amino acids and oligosaccharides, which are further used as a building material for skin regeneration. Average course of treatment with drugs costs 600-700 UAH. That is expensive for the population of Ukraine. Therefore, it is rational to develop domestic, budgetary preparations for the local treatment of hypertrophic scars.

Conclusions. Development of available and high quality medicines is a top priority of the Ukrainian pharmaceutical industry. Considering the small and expensive assortment of existing drugs it is rational to create domestic drugs for the treatment of hypertrophic scars.