Centre for thermal injury and reconstructive plastic surgery, Tbilisi, Georgia

Study of the therapeutic efficacy of the drug "Kamelin-M3" in the treatment of patients with thermal injury and burn disease

The skin is one of the body's natural defences against various harmful environmental influences. Biochemical, ultrastructural and functional relationships between skin cells and cells of the immune system and interactions between the cells are essentially immunological phenomena.

The cellular composition of the skin includes lymphocytes, fibrocytes, histiocytes, fibroblasts,

dendritic cells. In various pathological skin conditions, these cells provide essential protective functions: phagocytosis and elimination of antigenic material, production of cytokines and immunoglobulins

Severe injuries accompanied by skin damage, marked poisoning, and frequent infectious complications include thermal paralysis. Burns destroy the skin barrier while denaturing skin cells and proteins that affect local immunity. Components of burn blister exudate, reduce opsonisation

microorganisms and also inhibit lymphocyte proliferation, chemotaxis and neutrophil movement.

Therefore, a wide range of drugs are used in the clinic, which should ideally have a syndrome of restorative, anti-inflammatory effects,

anti-infective, immunostimulatory, i.e. act on such factors that are present in excess and are major 'players' in the pathogenesis in burn disease.

Kamelin-M3, a national, quite original therapeutic and prophylactic agent, made from a special type of honey, contains biologically highly active substances: aldehydes, carboxylic acids, ketones, phenols.



Patient 9 years Thermal burn 8% /I-III degree

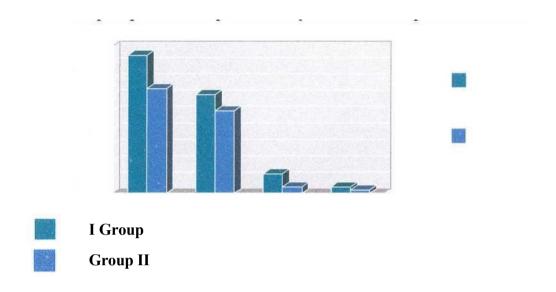
In some areas, the burns were grade 2 and surface 3 (according to the By the standards of the world classification, these burns are called grade 2-deep). Such burns are also problematic because they often leave characteristic scars and post-burn pigmentation.

The images show rapid epithelial buildup, with no major pigmentation or scar complications (after application of camellia ointment).

Kamelin-M3 has anti-inflammatory properties, activates immunity and accelerates the healing process.

If we consider "Kamelin-M3" from this angle, we can certainly state the presence of the listed properties in the drug

Therapeutic effect of the drug Activation of repair processes with increased collagen reproduction





Patient 15 years
Thermal burn 10% / 1st - 3rd degree
Acceleration of epithelial growth stages, without complications.



Patient 14 years Thermal burn 15% / 1st - 3rd degree

The accelerated epithelial buildup following treatment with camellia ointment produces a good aesthetic result.

Treatment evaluation	I-Carmelin-3M	II-Traditional
		treatment
Average duration of surgical	18,3	23,2
treatment after burn injury (days)		
Average duration of surgical	16,1	21,4
treatment after hospital admission		
(days)		
Average post-operative time	14,2	18,6
restoration of skin integrity (days)		
Frequency of graft lysis	3,8	16,2

Patient 47 years old Electric shock, burn shock 45% (25%)



Deep burns requiring surgical reconstruction of the skin envelope. Require timely preoperative preparation of burn wounds for autoplasty.

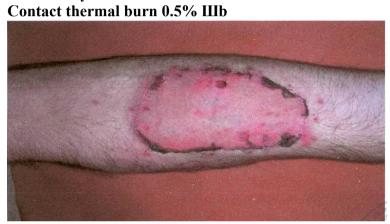
"Kamelin-M3" indeed shortened this stage

Primary autodermoplasty Patient 42 years old Thermal burn 10% (3%) II-IIIa-IIIb





In such cases, early excision of the damaged tissues with immediate autoplasty is recommended for the best functional outcome. Surgical treatment against Kamelin-M3. Primary autodermoplasty
Patient 18 years old



Condition after primary early autoplasty against a camellia application.

Patient 25 years old Complicated open wound



Staged conservative treatment with Kamelin (ointment).

Patient 58 years old Electrostatic damage





Stages of accelerated epithelial growth (against a camellia ointment background).

Conclusions

Thus, 'Kamelin-M3-ointment' has an anti-inflammatory effect in the damaged area, neutralises the toxic effects of burn products in tissues. Based on these data, we can assume that as patients heal, these properties of Kamelin-M3 will be enhanced, helping to further regulate and improve repair processes, the antimicrobial properties of Kamelin-M3 could become an excellent way of prevention of infectious complications in the burn area.

Manager Director Centre for thermal injury and reconstructive plastic surgery, Tbilisi, Georgia

Dormitory Besik Iashvili (Бесик Иашвили)