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THE USE OF COMBINED TREATMENT OF MICROBIAL ECZEMA WITH THE PREPARATION BETAMETHASONE-DARNITSA

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Abstract:
In our work, we observed patients with microbial eczema who received the cream "betamethasone-darnitsa" against the background of standard treatment.
15 patients aged 18 to 42 years were examined. Women – 5, men-13. On average, the duration of the disease ranged from 2 months to 5 years. Based on our research, we made the following conclusions: the drug "Betamethasone-Darnitsa" has a high therapeutic effectiveness and can be used in the treatment of patients with microbial eczema.

Key words: Microbial eczema, treatment experience, betamethasone-darnitsa.

Introduction:

Microbial eczema is a chronic recurrent dermatosis characterized by an evolutionary polymorphism of the elements of the rash, wetness, itching, an allergic reaction of the sensitized skin to the decay products of microorganisms and their toxins, developing against the background of a

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long-existing pyogenic focus with a violation of the most important immune and endocrine regulatory systems of the body [1]. According to modern concepts, microbial sensitization can be a trigger, supporting and aggravating factor in patients with eczema [2]. In the pathogenesis of microbial eczema, beta-hemolytic streptococcus group B, representatives of the genus of staphylococci — golden and epidermal staphylococci play an important role. Microbial eczema can also be caused by non-specific pathogens, such as Proteus vulgaris, Neisseria meningitidis, Neisseria gonorrhoeae, Cl. perfringens, Cl. histolyticum, Cl. septicum, Pseudomonas aeroginosa. The number of yeast-like fungi of the genus Candida, which are also involved in the eczematous process, increases in more than half of cases [3]. In chronic dermatitis often occurs, the imbalance of microorganisms on the skin surface due to an increase in the allocation of water through the epidermis, a violation of the secretion of the sebaceous glands, disorders of keratinization, shift the pH of the skin from acidic to neutral side [4]. Currently, most authors assign a leading place in the pathogenesis of microbial eczema to various immune disorders [5]. Pathogenic microorganisms have a sufficiently pronounced antigenic activity, which leads to sensitization of the body and contributes to the restructuring of the immune response [6].

In patients with microbial eczema, a relative increase in the content of lymphocytes expressing CD4+, CD25+, CD95+, CD3+, HLA-DR+ markers on their surface, an increase in the CD4+/CD8+ ratio, a relative decrease in the content of cells expressing CD8+, CD16+ markers and the phagocytic activity of leukocytes is recorded. The decrease in CD8+ levels may be due to their redistribution to the focus of inflammation in the skin. An increase in the expression of HLA-DR+ is an adequate response of T-lymphocytes to antigenic stimulation. Suppression of B-lymphocytes leads to more severe damage to the body by the antigen. The inhibition of the humoral immune response is manifested in a decrease in the concentrations of serum IgM, IgG, complement, and an increase in the concentrations of serum IgA and myeloperoxidase [7]. In connection with the active inflammatory process in the skin, an increase in the concentration of pro-inflammatory cytokines is observed: IL-8 and IL-1α, and the level of IL-1β and TNF-α, on the contrary, decreases [7]. The above-described evidence suggests that the possibility of introducing infectious agents depends primarily on the state of the immune system [5]. In primary or secondary immunodeficiency states, a weak immune response develops in response to the introduction of microbial or chemical allergens. The resulting

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persistence of allergens leads to even greater dysfunction of the immune system [8]. Elimination of the action of microbial, mycotic dissemination and normalization of the skin biocenosis in microbial eczema are the key principles of treatment of patients who prevent the recurrence of chronic eczema [1]. Therefore, an important aspect of the treatment of microbial eczema is antibacterial and antimycotic agents. Taking into account the above, it seems pathogenetically justified to use a topical combined four-component preparation of the cream "Tetraderm". One of the components of the drug is a broad — spectrum antibiotic from the group of aminoglycosides-gentamicin sulfate, active against a number of Gram-positive (Staphylococcus aureus) and gram-negative (Pseudomonas aeruginosa, Aerobacte raerogenes, Klebsiella pneumonia, Proteus vulgaris, Escherichia coli, etc.) bacteria.

The second component is represented by an antifungal preparation of a synthetic imidazole derivative — econazole, which has a fungicidal and antibacterial effect against yeast-like fungi of the genus Candida, Corynebacterium minutissimum, Malassezia furfur and dermatophytes Microsporum, Trichophyton, Epidermophyton. The third component is a synthetic glucocorticosteroid-mometasone furoate, which has pronounced antiexudative, antipruritic and anti-inflammatory effects. The composition of the drug also includes dexpanthenol-a derivative of pantothenic acid, which stimulates skin regeneration, normalizes cellular metabolism, accelerates mitosis and increases the strength of collagen fibers. Thus, the drug simultaneously has an antibacterial, fungicidal, anti-inflammatory, antipruritic and regenerating effect.

Among the drugs with various chemical structures that are presented on the domestic pharmaceutical market, the group of betamethasones deserves special attention. To date, it includes 14 drugs (including combined ones — with an antibiotic, antiseptic, antimycotic and keratolytic) from 10 manufacturers (both domestic and foreign). They are available in three dosage forms-lotion, cream and ointment. Interest in the betamethasone group among doctors and dermatologists, as evidenced by a fairly large number of drugs in it, is caused by high efficiency and safety with adequate use. Betamethasone belongs to a fluorinated corticosteroids for long periods. The strength and duration of its action is provided not so much by fluorination, but by triple methylation and esterification, which ensures high safety [8].

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The aim of this study was to evaluate the clinical efficacy of the cream "betamethasone-darnitsa" in patients with Microbial eczema.

Materials and methods: in our studies, we observed patients with microbial eczema who applied to the city skin disuses dispensary of the city of Samarkand from the time period 2018-2019. The diagnosis of microbial eczema was made on the basis of the clinical picture and laboratory confirmed. In total, there were 15 patients, aged from 18 to 42 years. Women – 5, men-13. On average, the disease duration ranged from 2 months to 5 years.

Results and discussion: in order to find new effective methods of treating microbial eczema, we used the ointment of the Ukrainian pharmaceutical company "Darnitsa" - "Betamethasone-Darnitsa"for external therapy. Active substance of the ointment are: betamethasone valerate and TSE-terpyridine chloride. All patients were treated with detoxification, hyposensitizing, antihistamine therapy and vitamin therapy according to the standard and clinical protocol for the treatment of skin diseases. "Betamethasone-Darnitsa" was applied to the lesions twice a day, for 7-10 days. Already on the 3-5 day of treatment, 7 patients had the cessation of serous discharge, the absence of peripheral inflammation, and the disappearance of itching. On the 10th day, 15 patients had a complete clinical recovery. Two patients were cured on the 14th-15th day.

Conclusions: Thus, the drug "Betamethasone-Darnitsa" has a high therapeutic effectiveness and can be used in the treatment of patients with microbial eczema.

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