

MODERN THERAPY OF "STEROID SENSITIVE DERMATOSES" WITH THE USE OF TRADITIONAL MEDICINE METHODS

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Abstract. *The concept of "steroid-sensitive dermatoses" combines skin diseases sensitive to GCS therapy. The most common include atopic dermatitis (AtD), eczema, psoriasis, toxicoderma, lichen planus, contact allergic and irritant dermatitis, photodermatitis, cutaneous forms of lupus erythematosus. The term "allergodermatoses" means a formally isolated group of inflammatory diseases, in the development of which allergic reactions play an essential role. The frequency of allergodermatoses, according to statistics, increases annually, and mainly among people of young working age and represents a difficult problem, both in determining its causes and in choosing therapy. These diseases are characterized by a long, often recurrent course, genetic predisposition, immune-dependent mechanism of development, lack of specific therapy. Patients with steroid-sensitive dermatoses have pronounced cosmetic problems and a significant decrease in the quality of life. Treatment of dermatoses includes stopping the progression of the disease, achieving stabilization of the inflammatory process with the help of systemic or topical therapy. Despite the variety of etiological factors, mechanisms of development of these diseases, as well as huge clinical differences in localization, morphology of rashes, subjective complaints of the patient, the basis for the implementation of inflammation in the skin is a number of immunological changes. Approaches to the treatment of these diseases are determined by their etiological and pathogenetic mechanisms of development and consist in carrying out elimination measures, the use of both systemic and external pharmacotherapy.*

Keywords: *steroid-sensitive dermatoses, allergodermatoses, atopic dermatitis, allergic contact dermatitis, external therapy, goose fat.*

Currently, there has been a significant increase and widespread occurrence of allergic dermatoses or "steroid-sensitive dermatoses". This group of diseases, which includes inflammatory skin diseases of a non-infectious nature, is commonly called "steroid-sensitive dermatoses": allergic contact dermatitis, atopic dermatitis, psoriasis, seborrheic dermatitis, eczema, toxidermia, urticaria, limited neurodermatitis, lupus erythematosus, lichen planus, photodermatitis, reactions to insect bites. Despite the differences in their pathogenetic mechanisms and clinical manifestations, they have many similarities, which determines their high therapeutic response to external glucocorticoids. They are characterized by a high population frequency, a long, often recurrent course, genetic predisposition, an immune-dependent mechanism of development, pronounced cosmetic problems, lack of specific therapy, and a significant decrease in the quality of life [1].

The prevalence of AtD among the adult population is 1-5%. The frequency of AtD in children and adolescents is 20% of all dermatitis. [2–3]. The development of complications in these diseases has predetermined the interest in improving external therapy. Violation of the skin barrier, an increase in transepidermal water loss, a change in pH lead to a decrease in the protective

mechanisms of the skin, as a result of which there is an increased susceptibility of the skin to infections [4]. The change in the microbiota of the skin contributes to the constant sensitization of the body due to the antigenic activity of microbial superantigens [5]. Staphylococcus aureus superantigens stimulate Langerhans cells and T-cell proliferation, and also act as allergens that increase inflammation, which leads to a decrease in the barrier function of the skin, promotes secondary infection, the spread of bacterial and fungal infections. Complications caused by Staphylococcus aureus are among the most frequent in allergic dermatoses [6-8]. Thus, atopic dermatitis is accompanied by excessive growth of Staphylococcus aureus [9]. The prevalence of bacterial infection has a positive correlation with the duration of the disease, the severity of itching [10]. The high frequency of secondary infection of allergodermatoses, disorders of innate and adaptive immunity support the chronic course, contribute to a decrease in the quality of life of patients [11]. The course of secondary pyoderma is well known, accompanied by an increased inflammatory reaction, pustulation, and the spread of serous-purulent and purulent hemorrhagic crusts on the surface and along the periphery. To date, there is a large selection of topical GCS on the domestic pharmaceutical market. The basis of these drugs is betamethasone dipropionate, which has high anti-inflammatory and anti-allergic activity and does not have a noticeable systemic effect. When treated with topical medications, it is possible to achieve restoration of the damaged epithelium and dermis, elimination of dry skin and improvement of the barrier properties of the skin. The use of topical GCS allows to achieve the effect of suppressing the inflammatory process, have antiallergic, vasoconstrictive, antiproliferative and immunosuppressive effects. [12]. The presence of different clinical forms of drugs (cream and ointment) allows them to be used at various stages of the inflammatory process. Intermittent therapy with topical GCS can significantly improve the quality of life of patients. Maintaining long-term remission, in turn, significantly improves the condition of the skin: the level of sebum secretion increases, transepidermal water loss decreases, skin hydration improves, peeling decreases [15]. Despite the fact that allergodermatoses are polyethological and multifactorial diseases and their treatment requires an integrated approach, external therapy occupies the main place in the treatment of these diseases. [13].

In order to evaluate the effectiveness and safety of a complex GOOSE FAT+ ointment in the form of cream and ointment, a comparison of its effect and tolerability in various forms of allergodermatoses was carried out. [14].

Materials and methods: The object of the study were patients who were on day inpatient treatment at the clinic "Integrative and Folk Medicine" at BUKHGOSMI for the period from 2022 to 2023 with steroidsensitive dermatoses.

The criteria for inclusion in this study were:

- clinical signs of stereosensitive dermatoses or atopic dermatitis or true eczema in the acute stage;
- severity of atopic dermatitis from 20 to 60 SCORAD points or severity of true eczema from 20 to 50 EASI points;

The exclusion criteria were:

- the state of erythroderma;
- hypersensitivity to the components of the means used;
- age under 2 years;

- the presence of any condition that may create an unjustified risk of harm to the patient's health;

- therapy with systemic glucocorticoid agents, during the previous 4 weeks;
- therapy with topical corticosteroid drugs during the previous 3 weeks.

During the study, registration of any adverse events was mandatory for further evaluation of the safety of the studied drugs. Under our supervision in the main group there were 62 patients aged from 17 to 35 years, including 31 women, 31 men. Atopic dermatitis was diagnosed in 34 patients, true eczema – in 28 patients. The duration of the disease ranged from 3 months to 15 years. All patients previously received repeated courses of treatment, including antihistamines, desensitizing agents, topical preparations containing glucocorticoids, naphthalan, 4 patients previously received physiotherapy in the form of ultra-high frequency therapy. At the time of the examination, all had signs of an exacerbation of the skin process, increased itching, and sleep disorders.

The diagnosis of "atopic dermatitis" was made on the basis of basic and additional modified criteria Hanifin J.M. & Rajka G.:

- itchy skin,
- age-related changes in characteristic skin lesions,
- chronic recurrent course,
- the presence of atopic diseases in the patient and/or his relatives,
- beginning at an early age,
- seasonality of exacerbations,
- aggravation of the process under the influence of provoking factors (allergens, irritants, food, emotional stress),
- dry skin,
- white dermographism,
- tendency to skin infections,
- heilit,
- Denier–Morgan symptom,
- hyperpigmentation of the skin of the periorbital region, - increased content of total and allergen-specific IgE in serum,
- peripheral blood eosinophilia.

Medicinal components of goose fat:

- Polyunsaturated fatty acids – provide normal metabolism and metabolism in tissues, boost the immune system in the skin, accelerate tissue regeneration, naturally moisturize the skin and make it more elastic.

- Omega 3 (oleic acid) – renews and rejuvenates tissues;
- Omega 6 (linoleic acid) – restores protective functions, has antioxidant and anti-inflammatory functions, slows down moisture loss.

- Vitamin E (tocopherol) – slows down the aging processes of tissues, normalizes blood circulation and microcirculation in the upper layers of the skin, increases cell regeneration, helps get rid of scars, smoothes wrinkles.

-B vitamins – increase metabolic processes in skin cells, improve the penetration of nutrients to them.

-Selenium – gives the skin elasticity and velvety, smoothes wrinkles, relieves itching and irritation.

- Sodium – maintains a normal water balance in the skin;

- Magnesium – improves metabolic processes in cells, slows down their aging;

-Zinc – reduces redness and irritation, normalizes the sebaceous glands, improves tissue healing.

Results and their discussion

In all patients, there was a marked decrease in itching, erythema, swelling on the 3rd day of the use of the natural remedy "GOOSE FAT+". In the future, the regression of rashes gradually continued. By the 6th day of treatment, the well-being of all patients improved, itching decreased. After 7-10 days of using "GOOSE FAT+", a complete regression of the island-inflammatory phenomena was noted, night sleep was restored. On the 12th-15th day, significant improvement was noted in all patients. After treatment, the LVI improved and amounted to 7.8 ± 5.5 (Fig. 1). SCORAD decreased to 8 ± 1.0 (Fig. 2). EASI decreased to 7.1 ± 0.5 (Fig. 3).

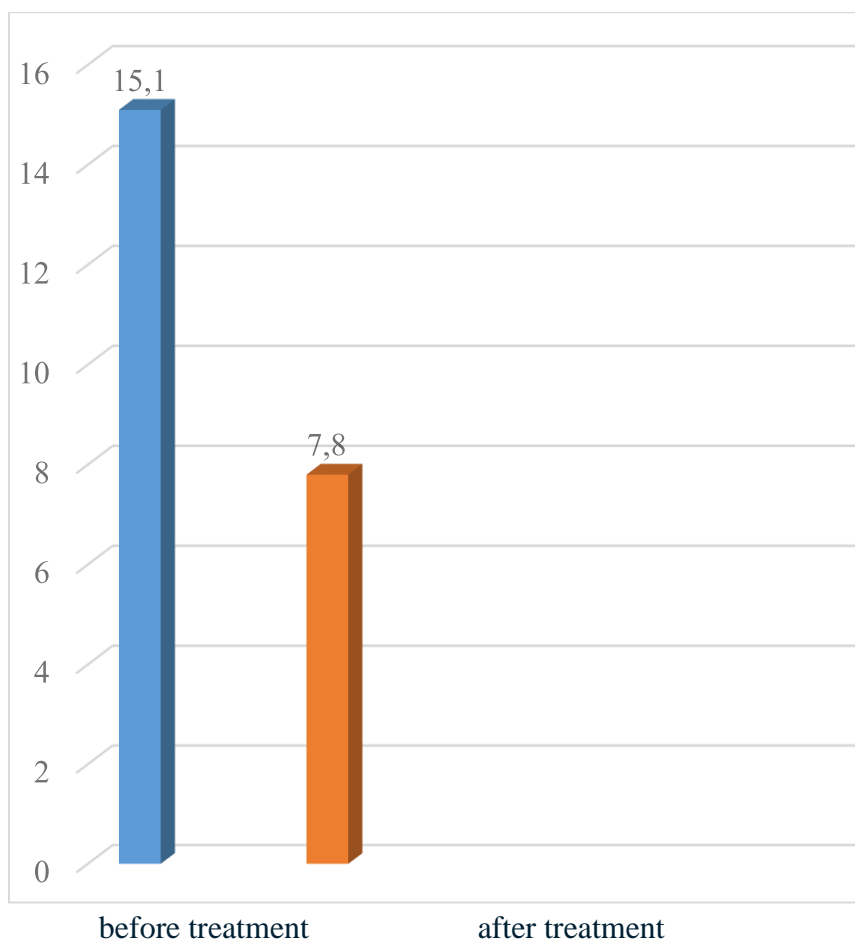


Fig.1. Dynamics of DIQ in patients receiving "GOOSE FAT+" in the form of an external ointment

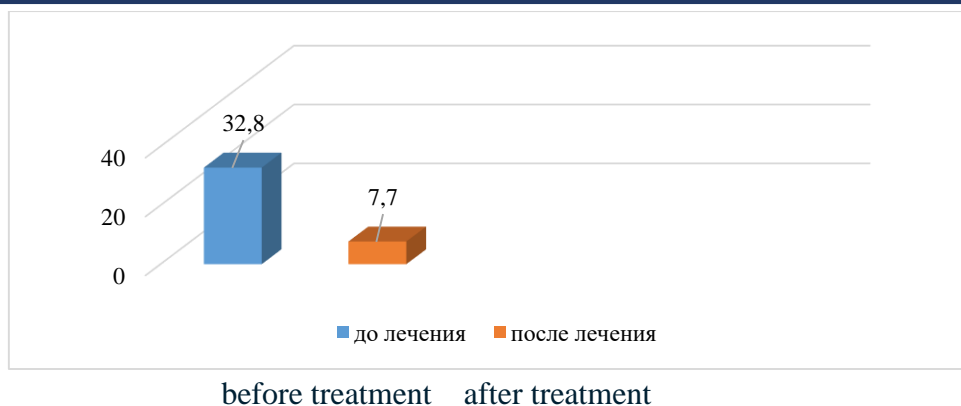


Fig.2. Dynamics of SCORAD in patients receiving "GOOSE FAT+" in the form of an external ointment

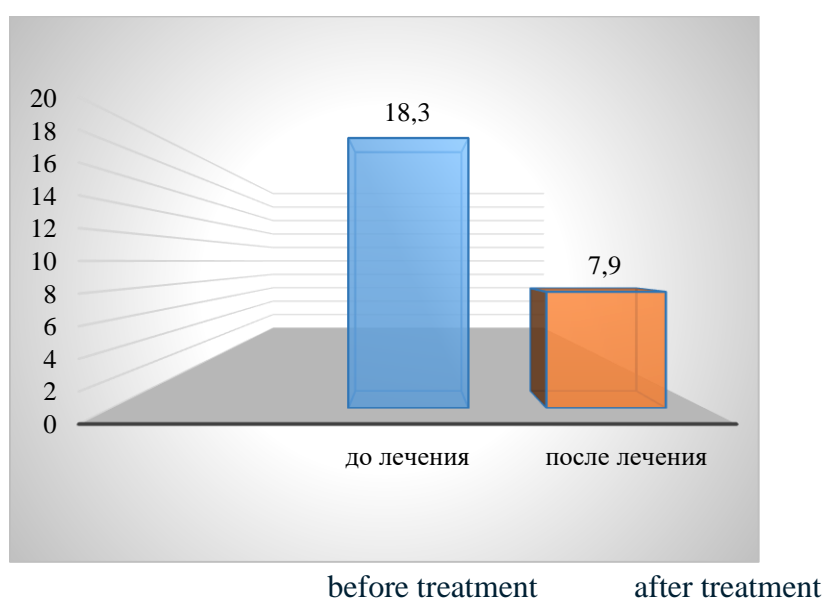


Fig.3. Dynamics of EASI in patients receiving "GOOSE FAT+" in the form of an external ointment

Conclusions:

Therapy was well tolerated by all patients; no adverse reactions or adverse events were noted in any case. There was also no negative effect of the therapy on peripheral blood and urine parameters. The results obtained by us confirm the previously described high therapeutic efficacy and safety of the use of the natural remedy "GOOSE FAT+" based on goose fat for steroid-sensitive dermatoses or allergodermatoses. Having no side effects, "GOOSE FAT+" was easily used in patients. The effectiveness of complex methods of treating steroid-sensitive dermatoses with the help of traditional medicine, as well as new treatment tactics to improve pronounced cosmetic problems. On this basis, new complex methods of treatment with the inclusion of traditional medicine methods for steroid-sensitive dermatoses have been developed for the first time. External therapy with goose fat allowed to eliminate the inflammatory reaction and subjective sensations of itching, pain, burning; reduce violations of the epidermal barrier and protect the skin from adverse environmental factors, stimulate reparative processes in the skin, as

well as control the attachment of secondary bacterial and fungal infections. To improve the effectiveness of treatment, a new therapeutic agent GOOS FAT+ has been developed and put into practice. The developed complex treatment of steroid-sensitive dermatoses in patients will allow timely application of the developed new adequate tactics of antibacterial and antifungal therapy, and thus not only improve the quality of treatment of patients, but timely and short-term eliminate pronounced cosmetic problems and significantly increases the decline in quality of life, prolong remission, but also reduce the length of stay of patients in hospital.

REFERENCES

1. General Allergology Vol.1. Edited by G.B.Fedoseev.–St. Petersburg, 2001, pp.42-382
2. Atopic dermatitis:A guide for doctors / Edited by Yu.V. Sergeeva.–M.:Medicine for all.2002.–183s.
3. Fitzpatrick D.E., Eling D.L. Secrets of dermatology.M., "Binom". 1999, p.64, p.385–393.
4. Shakhtmeister I.Ya., Shimanovsky N.L. New possibilities in the treatment of inflammatory and allergic dermatoses with external drugs of glucocorticoid nature. International Medical Journal, 1999, No. 3, pp.59-61
5. Belousova T.A., Kochergin N.G., Krivda A.Yu. Corticosteroid preparations for external use. Russian Journal of leather. and ven. bol., 1998, No. 3., pp.78-79
6. Kochergin N.G., Belousova T.A. On the issue of local corticosteroid therapy. Ros. journal. leather. and ven. bol., 2001, No. 2., from 28-31
7. Belousova T.A. Modern approaches to external therapy of allergodermatoses. Materia Medica, 2002, No.3-4.pp.60-73
8. Ponamarev V.N. Local corticosteroids in dermatology. Rus. med. journal., 1999, vol.7, No. 19, pp.1-5
9. Sergeev Yu.V. Effective approaches to supportive external therapy of atopic dermatitis. Bulletin of derm. and venerol., 2003, No. 4, pp.43–46
10. Samgin M.A. Sevidova L.Yu. The effectiveness of laticort in steroid-sensitive dermatoses. Ross. journal. leather. and ven. bol., 1998, No.1, pp.37-39.
11. Samgin M.A., Monakhov S.A. Local corticosteroid agents of the Polish Pharmaceutical Plant "Elfa A.O.". Rus.med.journal., 2003, vol.11, No. 17, pp.964-969
12. Miller 18.J.A., Munro D.D. Drugs,1999, p.119-134.
13. Barnes P.J. Optimizing the anti-inflammatory effects of corticosteroids. Eur Resp Rev 2001;11:78:15
14. Karimova F.R. MODERN ASPECTS OF THERAPY OF VARIOUS TYPES OF ALLERGODERMATOSES USING COMPLEX OINTMENT "GOOSE FAT+" AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI 71-77str
15. Karimova F.R. Optimising methods for the prevention of acute allergic conditions. Deutsche internationale Zeitschrift für zeitgenössische Wissenschaft 2022. pp. 9-11
16. Karimova F.R. Clinical manifestations of acute allergic conditions in children // Bulletin of the Council of Young Scientists and Specialists of the Chelyabinsk region. No. 3. No. 2(17) pp. 40-46
17. Karimova F.R. Optimization of Treatment of Steroid-Sensitive Dermatoses by Methods of Traditional Medicine AMERICAN Journal of Pediatric Medicine and Health Sciences Volume 01, Issue 04, 2023 ISSN (E): XXX-XXX

18. Karimova F.R. Optimization of Allergodermatosis Treatment. AMERICAN Journal of Pediatric Medicine and Health Sciences Volume 01, Issue 04, 2023 ISSN (E): XXX-XXX
19. Karimova F.R Etiological Factors of Acute Allergic Conditions in Children Living in the Conditions of the City of Bukhara. AMERICAN Journal of Pediatric Medicine and Health Sciences Volume 01, Issue 04, 2023 ISSN (E): XXX-XXX