

SELECTING A TREATMENT METHOD FOR SEBORRHEIC DERMATITIS

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ABSTRACT. The article is devoted to the analysis of modern methods of treating seborrheic dermatitis to select the most effective therapy. The clinical manifestations of the disease, factors influencing the course of seborrheic dermatitis, as well as the comparative characteristics of pharmacological and non-drug treatment methods, including local and systemic drugs, and plant-based agents, are examined. Recommendations are given for individualizing therapy, taking into account the severity of the disease and accompanying factors. The work can be useful for dermatologists, therapists, and medical students.

Keywords: seborrhoeic dermatitis, clinic, Mycobiological, staphylococcus spp, Pityrosporum spp., treatment.

ВЫБОР МЕТОДА ЛЕЧЕНИЕ СЕБОРЕЙНОГО ДЕРМАТИТА

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АННОТАЦИЯ. Статья посвящена анализу современных методов лечения себорейного дерматита с целью выбора наиболее эффективной терапии. Рассматриваются клинические проявления заболевания, факторы, влияющие на течение себорейного дерматита, а также сравнительная характеристика фармакологических и немедикаментозных методов лечения, включая местные и системные препараты, а также средства растительного происхождения. Приводятся рекомендации по индивидуализации терапии с учётом тяжести заболевания и сопутствующих факторов. Работа может быть полезна дерматологам, терапевтам и студентам медицинских факультетов.

Ключевые слова: себорейный дерматит, клиника, микробиология, staphylococcus spp, Pityrosporum spp., наружное лечение

Introduction. Seborrheic dermatitis is a chronic, recurrent skin disease characterized by lesions of skin areas rich in sebaceous glands. According to literature data, the disease occurs in 3% of the population and is more common among young people aged 20 to 40. [1, 3, 5, 7, 6, 11,13].

Despite numerous developments in general therapy, taking into account endogenous pathogenetic and etiological factors in patients with skin diseases, rational external treatment plays a leading role. [10,11]

Purpose of the research. The purpose of our research was to develop optimal methods of external therapy in patients with seborrheic dermatitis, taking into account their microbiological status.

Research materials and methods: 76 patients with seborrheic dermatitis aged 12 to 54 years, with a duration of the disease from 6 months to 12 years, were observed. Among them, 46 were men and 32 were women.

All patients underwent clinical and microbiological studies.

Clinical studies were characterized by determining the dermatological index of the symptom scale (SDS) before and after treatment. Microbiological studies of the skin consisted of backseeding the skin scales of the affected areas and the uninfected area. For microbiological studies, 5% blood agar, Endo, Lewin medium, and salt agar with mannitol were used. The culture was incubated in a thermostat at a temperature of 36.80°C.

Results and discussions. A study of the clinical course of seborrheic dermatitis showed that out of 76 patients, 27 (35.5%) were diagnosed with mild severity, 38 (50%) with moderate severity, and 11 (14.5%) with severe severity. A mild course of seborrheic dermatitis was characterized by the presence of erythematous-squamous rashes on the skin of the hairy part of the head, face, especially in the nasolabial folds, against a background of the patient's satisfactory general condition. Moderate severity was characterized by the prevalence of the cutaneous-pathological process (skin of the hairy part of the head, torso, upper limbs), pronounced hyperemia, infiltration.

The severe degree (11 patients) was characterized by the accumulation of a large number of fatty scales, massive crusts on the skin of the hairy part of the head. On the skin of the lesions, there were signs of maceration, moisture, and cracks in places. In addition to skin manifestations, these patients reported complaints from the gastrointestinal tract, sometimes fever.

The results of microbiological studies of the skin of the lesions showed an increase in the conditionally pathogenic flora in the skin of the lesions in 70 (92.1%) patients. Thus, in 61 (80.3%) patients - growth of staphylococcus spp., in 9 (11.8%) - growth of lipophilic yeast-like fungi of the genus *Pityrosporum* spp. Among the representatives of the Micrococcaceae family, the pathogenic flora *st.aureus* was most commonly cultivated - in 24 (39.3%) patients, *st. Haemolyticus* - in 14 (22.9%), *st.saprophyticus* - in 15 (24.5%), *st. epidermidis* - in 8 (13.1%). At the same time, the contamination of the pathogenic flora staphylococcus ranged from 480 to 1970 CFU/cm², respectively. Among the lipophilic yeast-like fungi, *Pityrosporum ovale* was cultivated in 9 patients with lesions of the hairy parts of the head and body.

Table No1. Indicators of conditional pathogenic flora growth in lesions in patients with seborrheic dermatitis, taking into account the severity of the disease. (WHAT)

Degree of gravity	st. aureus	st. Haemolyticus	st. saprophyticus	st. epidermidis	Pityrosporum spp
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Light degree N=13	5		7	1	4
Average N=37	8	14	8	7	1
Heavy N=11	11				4
Total N=61	24	14	15	8	9

Analysis of the clinical course, taking into account the microbiological status, showed that in patients with severe severity, in 100% of cases (11), st.aureus was cultured with a high colony, averaging 1818.4 ± 50.4 CFU. ($P < 0.05$). It should be noted that in 4 patients of the same group, the yeast-like lipophilic fungus *Pityrosporum* spp. was inoculated, which caused mixed contamination of conditionally pathogenic microorganisms in the lesions. Meanwhile, in patients with moderate severity, Micrococcaceae family microorganisms were isolated in 97.4% of cases: st.aureus - in 21.6%, st. haemolyticus - in 37.8%, st.saprophyticus - in 21.6%, st. epidermidis - in 18.9%, respectively. In patients with mild severity, st.aureus was sown in 38.5% (13 out of 5 patients), and st.saprophyticus in 53.8% (7), respectively. The yeast-like lipophilic fungi *Pityrosporum* spp. were mainly sown in patients with mild and severe forms of the disease, respectively.

The obtained data indicate a high incidence of pathogenic microflora from the Micrococcaceae (st.aureus, st. haemolyticus) family in patients with seborrheic dermatitis, which contributes to the aggravation of the clinical course of dermatosis.

The study of the antibacterial sensitivity of staphylococcus spp. showed high sensitivity to aminoglycoside groups (mercacin, neomycin sulfate - 96-97%), macrolide groups (azithromycin - 83%), fluoroquinolones (levofloxacin - 90-92%, ciprofloxacin - 81% respectively), cephalosporin groups (cephotoxime, ceftriaxone - 90-93% respectively), which indicates the high pathogenicity of these microorganisms.

The detection of pathogenic microflora with high colonization leads to a decrease in both general and local immunity and the inadequacy of the body's cellular reactivity system, characterized by a decrease in pro- (TNF-alpha) and anti-inflammatory (IL-4) cytokines, which contributes to the development of microbial contamination on the skin in patients with seborrheic dermatitis. [2,8,9]

Considering the clinical and microbiological indicators in patients with seborrheic dermatitis for local treatment, it is necessary to use medications capable of simultaneously affecting all pathological mechanisms. It should be noted that in most cases, external use of medicinal forms with antibiotics or antifungal drugs without the inclusion of glucocorticoids in their composition can lead to an exacerbation of the inflammatory, primarily allergic, process. Therefore, in these conditions, the search for new highly effective multicomponent preparations with a wide spectrum of action is relevant.

In patients with seborrheic dermatitis with severe and moderate severity of the disease, we used the external drug trinaazole, which has antimicrobial, anti-

inflammatory, and anti-allergic properties. The drug contains ketokonazole - 10 mg, clobetazole propionate - 0.25 mg, neomycin sulfate - 5000 IU. In modern dermatoses therapy, preference is given to glucocorticosteroids (GCs) that meet "effectiveness-safety" requirements and minimize the side effects of glucocorticosteroids.

Ketokonazole is an antifungal agent with a wide spectrum of action, affecting the fungal cell membrane by changing its permeability.

Clobetazole propionate is a corticosteroid hormone that acts as a highly effective anti-inflammatory and anti-allergic agent with minimal side effects.

Neomycin sulfate is a remedy against gram-positive and gram-negative bacteria.

To assess the clinical effectiveness of trinalazole, the dermatological index of the symptom scale (SDS) was determined. The DISHS index was determined by the following parameters: erythema, swelling, moisture, lichenification, papules, dryness (xerosis), peeling, erosions, and itching. The parameters were assessed on a 3-point scale, except for itching (4 points). At the same time, the DISHS index indicators were assessed according to the following criteria: with a decrease in the DISHS index indicators by 95%, it characterized clinical remission, 75-95% - significant improvement, 50-75% - improvement, 25-50% - insignificant improvement.

All patients underwent basic therapy according to the standard and clinical protocol for treating skin diseases, consisting of prescribing hyposensitizing, antihistamine therapy, vitamin therapy, and external therapy (the main group received trinalazole, and the control group received gentamicin ointment).

Trinalazole was applied to the affected areas twice a day for 5-7 days.

The criteria for inclusion in the study were:

1. Severe and moderate severity of the skin process.
2. Use by patients during the last 3 months of external therapy in the form of indifferent ointments and creams (without glucocorticosteroids)
3. Presence of voluntary informed consent of patients.

Table 2. Comparative assessment of DICS against the background of external therapy with trinalazole in patients with severe and moderate severity of seborrheic dermatitis.

Groups	Symptoms scale dermatological index						
	erythem a	swelling	Mok- dryness	Dryness	Peeling	Er- Roziya	Zud
Before treatment (trinalazole) N=27	2,9+0,01	2,6+0,04	1,6+0,0 2	1,8+0,0 2	2,6+0,06	1,6+0,02	3,9+0,01
After	1,2+0,01	0,7+0,02	0,8+0,0	1,2+0,	1,2+0,03	0,8+0,02	0,7+0,01

treatment (trinazole) N=27	*	*	3	02*	*	*	*
Control group Before treatment N=10	2,9+0,02	2,9+0,03	1,8+0,0 1	1,8+0,0 3	2,8+0,04	1,4+0,03	3,7+0,02
Control group after treatment N=10	1,9+0,02 *	2,1+0,04 *	1,5+0,0 4	1,6+0,0 3	2,5+0,03	1,3+0,03	2,7+0,03

As can be seen from Table 2, the use of trinazole contributed to a decrease in erythema by 58.6% ($P<0.05$), edema by 73.1% ($P<0.05$), peeling by 46.2%, and papular elements by 50%. The use of trinazole contributed to a significant reduction in subjective sensations - itching - by 5.6 times ($P<0.05$). Whereas, in the control group receiving only gentamicin ointment, DISHS did not have significant positive shifts, which contributed to the preservation of peeling, erosive areas, and itching.

In most cases, the patient is advised to create comfort in cases of external therapy. As such treatment, it is convenient to use medicinal shampoos or lotions, balms. One of the representatives of this group was the haikinazole balm, which contains ketokonazole (0.025 g), clobetazole propionate (0.00025 g), alcohol (0.013 g), sodium dodecyl sulfate (0.07 g), di-sodium edetat (0.01 g), and other components, which in combination exhibit anti-inflammatory, antimicrobial, and keratolytic properties.

Haikinozol was used in patients with mild and moderate severity of seborrheic dermatitis, which contributed to a positive dynamic of the dermatological index of the symptom scale. (Table 3).

Table No3. Comparative assessment of DICS against the background of external therapy with haikinazole in patients with moderate and mild seborrheic dermatitis.

Groups	Symptoms scale dermatological index						
	erythema	отек	erythem a	Сухость	erythema	Эр- розии	erythema
Patients with seborrheic dermatitis before treatment N=37	2,9+0,01	2,8+0,02	1,9+0,03	2,5+0,02	2,8+0,02	1,3+0,01	4,2+0,01
B-with seborrheic dermatitis after treatment	1,3+0,03 *	1,1+0,02*	0,7+0,02	1,6+0,03	1,4*+0,0 2	0,7+00,1	1,5*+0,01

Haikinazole N=37							
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Conclusion: it should be noted that the use of trinazole and haikinazole not only contributes to the positive dynamics of DIC in patients with seborrheic dermatitis, but also to the microbiological indicators of the lesions. Thus, in patients with lesions after treatment, a decrease in the level of colonization of the pathogenic flora was noted by 3.2 times - in the group receiving trinazole and 3.4 times - in the group receiving haikinazole, respectively. During the use of external drugs, no side effects were observed in the patients.

1. The use of trinazole and haikinazole for external use in seborrheic dermatitis is effective due to their anti-inflammatory and antimicrobial effects.

2. Trinazole - a sterility cream due to its antimicrobial, inflammatory, and allergenic effects, it is preferable to use it in patients with severe and moderately severe seborrheic dermatitis.

3. Haikinazole is a balm due to its anti-inflammatory and antimicrobial effects, preferably used in patients with moderate and mild seborrheic dermatitis. It should be noted that the haikinazole balm can be used as a supportive external therapy.

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