

Psoriasis associated with pruritus: variability of clinical manifestations spectrum, correlation analysis of psychopathological symptoms and their impact on quality of life

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The aim of the study is to determine the clinical and anamnestic characteristics of pruritus in psoriasis, as well as to analyse the spectrum of psychopathological symptoms and their impact on the quality of life in this cohort of individuals.

Materials and methods. The main group included patients with psoriasis accompanied by pruritus of varying intensity ($n = 15$) and patients with dermatosis without active pruritus ($n = 15$). The severity of skin lesions, intensity of itching, psychopathological aspects, and their impact on quality of life were assessed using questionnaires and psychodiagnostic methods.

Results. The area of skin lesions in both groups was assessed by the Psoriasis Area and Severity Index (PASI): for the main group, the median was 9.2 (7.5; 10.1), for the comparison group – 7.05 (5.95; 8.40), which demonstrated a statistically significant difference ($p < 0.05$). The intensity of pruritus assessed by visual analogue scale was significantly higher in the main group ($\text{mean } 5.60 \pm 0.21$) compared to the comparison group (1.90 ± 0.27). Correlation analysis revealed that for patients with pruritus, obsessive-compulsive symptoms ($r = 0.92$, $p < 0.05$) play the greatest role in the psychopathological aspect of the disease, while in patients without pronounced itching, symptoms of interpersonal sensitivity dominated ($r = 0.97$, $p < 0.05$). The main group of patients with psoriatic skin lesions associated with pruritus demonstrated a moderate impact on their life activities with a median of 9.5 (9.5; 16.5). Those respondents with only dermatosis rated the impact on quality of life as slight discomfort – 3.0 (2.5; 5.5).

Conclusions. Patients with psoriasis accompanied by severe pruritus, with a predominance of plaque form, have a more severe course of dermatosis, which is manifested by a higher PASI compared to patients with psoriasis without active itching. The psychodiagnostic assessment demonstrates the greatest influence of the group of obsessive-compulsive symptoms in the main group. The identified peculiarities of itching influence necessitate a better diagnosis of the pruriginous component and changes in approaches to personalized therapy for this group of patients.

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Псоріаз, асоційований зі свербжем: варіабельність спектра клінічних проявів, кореляційний аналіз взаємозв'язків психопатологічних симптомів та їхній вплив на якість життя

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Мета роботи – визначити клініко-анамнестичні характеристики свербжу при псоріазі, а також проаналізувати спектр психопатологічних симптомів та їхній вплив на якість життя у цих пацієнтів.

Матеріали і методи. До основної групи увійшли пацієнти з псоріазом, що супроводжувався свербжем різної інтенсивності ($n = 15$), та пацієнти з дерматозом без активного свербжу ($n = 15$). Оцінювання тяжкості уражень шкіри, інтенсивність свербжу, психопатологічні аспекти та їхній вплив на якість життя оцінювали за допомогою анкетування та шляхом застосування клініко-психодіагностичних методик.

Результати. Площу ураження шкіри в обох групах визначали за індексом PASI: в пацієнтів основної групи медіана становила 9,2 (7,5; 10,1), групи порівняння – 7,05 (5,95; 8,40), відмінності статистично значущі ($p < 0,05$). Інтенсивність свербжу, оцінена за допомогою візуальної аналогової шкали, значно більша в основній групі (середнє значення – $5,60 \pm 0,21$) щодо показника групи порівняння ($1,90 \pm 0,27$). Кореляційний аналіз показав: для пацієнтів із свербжем найбільшу роль у психопатологічному аспекті захворювання відіграють обсесивно-компульсивні симптоми ($r = 0,92$, $p < 0,05$), а в пацієнтів без виразного свербжу домінували симптоми інтерперсональної сенситивності ($r = 0,97$, $p < 0,05$). В основній групі хворих, котрі мали псоріатичні ураження шкіри, асоційовані з свербжем, визначено його помірний вплив на життєдіяльність (медіана – 9,5 (9,5; 16,5)). Респонденти, які мали лише дерматоз, оцінили вплив на якість життя в межах незначного дискомфорту – 3,0 (2,5; 5,5).

Висновки. У хворих на псоріаз, що супроводжується виразним свербіжем, у разі превалювання бляшкової форми зафіксовано тяжчий перебіг дерматозу, що виявили за вищим індексом PASI порівняно з пацієнтами з псоріазом без активного свербіжу. Психодіагностичне оцінювання дало змогу встановити в основній групі обстежених найбільший вплив комплексу obsесивно-компульсивних симптомів. Визначені особливості впливу свербіжу зумовлюють доцільність ретельнішої діагностики прurigінозного компонента та зміни підходів до персоніфікованої терапії цієї групи осіб.

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Psoriasis belongs to the group of chronic inflammatory dermatoses characterized by fairly recognizable clinical manifestations in the form of papular lesions with silvery-white scaling on the surface. Although research on this disease has always been a subject of lively debate among scientists in different historical periods, this dermatosis is still considered a systemic process that is not limited to skin lesions [1].

Cardiovascular pathology, musculoskeletal impairments, intestinal disorders and endocrine dysfunction are the most common conditions that make up the comorbidity halo for psoriatic disease [2,3,4]. However, among the above nosologies, mental disorders continue to be one of the most significant comorbidities. The study by T. L. Hedemann et al. demonstrates a higher prevalence of symptoms of depression, anxiety, and suicidal ideation in patients with psoriasis than in the general population [5]. The “skin-brain” interaction becomes especially relevant in the conditions of the stay of patients, both civilian and military contingent, in the front-line territories. This aspect is of particular importance in circumstances of constant stress and psychological strain.

On the other hand, next to the already known pathological conditions, new nosological units are beginning to appear, which can potentially affect the course of the main dermatosis. An example of this can be the phenomenon of itching, which goes beyond the scope of a routine symptom or just a subjective feeling and acquires the meaning of an independent phenomenon in the modern context. Thus, according to the task force of the European Academy of Dermatovenereology, chronic pruritus should be considered as an independent disease with functional and structural pathology of the skin and nervous system [6]. This thesis changes approaches to understanding itching, both within an autonomous condition and associated with dermatoses.

Psoriasis in the classical sense does not belong to the types of skin lesions accompanied by unbearable itching, obviously inferior to manifestations of lichen planus, atopic dermatitis, or mycosis fungoides. However, taking into account our own experience and the latest reviews of other representatives of the dermatological community, an emphasis is being formed on itching, which significantly affects the course of psoriasis, the quality of life, and the psycho-emotional background of patients. Therefore, there are many questions about whether itching in psoriasis is an independent “player” among other comorbid conditions, or only a subjective reflection of the action of exogenous or endogenous triggers, the degree of inflammation. In addition to the direct impact on the clinical manifestations of dermatosis, which are characterized by active keratinization and the appearance of excoriations, itching, regardless of the causal state, can be associated with changes in the mental status of patients. Such pruriginous aggravation objectively contributes to more frequent registration of depressive, and anxiety condi-

tions, disorders of the obsessive-compulsive spectrum, or sleep disturbances [7,8].

Psoriasis and pruritus, as separate nosological categories, are already characterized by specific clinical manifestations and can have a significant impact on the mental health of patients. At the same time, their synergistic interaction requires a review of traditional approaches to the assessment of not only skin lesions but also the psychopathological changes that may accompany these conditions. Establishing the relationship between psoriasis, pruritus, and psychiatric disorders is a dynamic process and may require individualized management taking into account all aspects of the disease to achieve optimal results in therapy.

Therefore, it is important to determine the role of itching in psoriasis, its potential not only clinical but also psychoemotional and social burden for patients, as well as the impact on adaptive capacity, and quality of life.

Aim

The aim of this work is to determine the clinical and anamnestic characteristics of pruritus in psoriasis, as well as the analysis of the spectrum of psychopathological symptoms and their impact on the quality of life in this cohort of individuals.

Materials and methods

The study was conducted on the basis on the Department of Dermatovenereology and Aesthetic Medicine of the Zaporizhzhia State Medical and Pharmaceutical University, the Medical Educational and Scientific Center “University Clinic” and the Regional Dermatovenereological Treatment and Diagnostic Center of the “Regional Infectious Clinical Hospital”. The first step before conducting clinical and psychopathological diagnosis was obtaining consent from patients to participate in this study, in accordance with the moral and ethical norms of the IGH/GCP, and the Declaration of Helsinki (1964 with additions in 1975, 1983, 1989, 1996, and 2000), European Convention on Human Rights and biomedicine and legislation of Ukraine. The Bioethics Committee of Zaporizhzhia State Medical and Pharmaceutical University gave permission to conduct the study, protocol No. 5 dated by May 22, 2024.

The next step was the clinical verification of the diagnosis of “Psoriasis” in 30 people with an emphasis on the presence/absence of pruritus. It was the last sign that became decisive for the further antagonistic distribution of the contingent of patients into groups: patients with skin lesions associated with itching ($n = 15$) and patients with only manifestations of dermatosis without a clinically significant pruriginous accent ($n = 15$). The area and severity of skin lesions were assessed using the PASI

index (Psoriasis Area and Severity Index; T. Fredriksson et al., 1978) with the calculation of the median (Me), lower and upper quartiles (Q1; Q3) [9].

The intensity of pruritus was assessed using a 10-point visual analog scale (VAS; N. Q. Phan et al., 2012. E. Verwey et al., 2019) questionnaire with a range of values from its absence (index 1) to maximum manifestation (index 10) [10,11]. The profile of psychopathological symptoms was determined using a symptomatic questionnaire SCL-90-R (Symptom Check List-90-Revised; L. Derogatis et al., 1994) [12]. This tool allows to systematize and define a psychopathological group of symptoms taking into account the following scales: somatization (SOM), obsessive-compulsiveness (O-C), interpersonal sensitivity (INT), depression (DEP), anxiety (ANX), hostility (HOS), phobic anxiety (PHOB), paranoid ideation (PAR) and psychoticism (PSY). The value of the strength of the correlation was estimated according to the Chaddock scale: "0.00–0.29" – negligible; "0.30–0.49" – weak; "0.50–0.69" – moderate; "0.70–0.89" – strong; "0.90–1.00" – very strong. In addition to the isolated assessment of the above-mentioned scales, a comprehensive quantitative measure, the Global Severity Index (GSI), was analyzed to evaluate the overall severity of the listed symptom groups.

When evaluating the standardized questionnaire DLQI (Dermatology Life Quality Index; A. Y. Finlay et al., 1994), the dermatological quality of life index is determined, taking into account the following distribution of the obtained points: 0–1 – no effect at all on the patient's life; 2–5 – minor effect; 6–10 – moderate effect; 11–20 – very large effect; 21–30 – extremely large effect [13].

Statistical processing of the obtained results is carried out on a personal computer in the program "Statistica® for Windows 13.0" (StatSoft Inc., license No. JPZ804I382130ARCN10-J).

Results

The main group was represented by 15 people with a clinically verified diagnosis of psoriasis, taking into account classic lesions on the skin, accompanied by pruritus of varying intensity. The gender distribution of patients in this group was represented by the predominance of men – 80 % (n = 12), while women accounted for 20 % (n = 3). The age indicators in the studied group ranged from 30 to 60 years, the average value was 47.2 ± 2.3 and 37.7 ± 5.4 in men and women, respectively.

The entire studied sample of patients has manifestations of vulgar plaque psoriasis with a median index PASI 9.2 (7.5; 10.1). In 40 % of patients, clinical and radiological criteria allowed to verify the diagnosis of arthropathic psoriasis. About the feeling of pruritus, the majority of patients articulated a complaint about this feeling already at the first clinical examination, the level of concern was not inferior to the intensity of the lesion on the skin. Separately, it is worth citing the results regarding the patients' description of this feeling.

Thus, in addition to the classical definition of "pruritus", the following synonyms were registered: "itching", "burning", and "tingling". The manifestation of itching was most often associated in patients with the beginning of an exacerbation, focusing specifically on the areas of psoriatic rash within the chest (80.0 %), back (66.7 %), upper and lower extremities (86.7 %), scalp (33.3 %). The

diurnal dynamics of this phenomenon are also noted, the majority of patients (60.0 %) reported a pronounced intensity of itching in the evening and at night, and 4 people from this sample had severe difficulties falling asleep, 2–3 times waking up during the night with the inability to fall asleep again quickly in sleep and disturbance of daytime activity. Furthermore, in addition to the direct presence of an inflammatory process on the skin, 73.3 % (n = 11) of patients attributed the increase in the intensity of itching to previous active stress. The presence of itching in areas of intact skin or during the period of remission in this cohort of individuals was not determined.

The comparison group is represented by patients with skin lesions corresponding to the clinical manifestations of psoriatic disease but without any active concern about the pruritus or its equivalents. Both groups are comparable in terms of gender and age distribution. Thus, in persons with isolated skin manifestations, men also made up the vast majority (n = 11, 73.3 %), and the female gender represented 26.7 % (n = 4). Age ranges range from 37 to 63 years, with a mean of 49.5 ± 2.8 for males and 47.0 ± 4.7 for females. The area of skin lesions and the degree of severity of the existing changes is 7.05 (5.95; 8.40) according to the PASI index. This feature shows a statistically significant difference when comparing both groups ($p < 0.05$).

Analysing the clinical manifestations in the patients of the studied sample, we have similar characteristics of the clinical form to the main group – the predominant manifestations of vulgar plaque psoriasis, while the criteria of arthropathic changes are present in only 20 % of patients. During the period of the study, these episodes of exacerbation in this cohort of individuals were not accompanied by significant complaints of subjective discomfort in the form of pruritus of the skin. However, 53.3 % of patients reported that during their lifetime they had pruriginous episodes in association with an active course of dermatosis. Thus, to understand the clinical homogeneity of both groups, it is worth emphasizing the defining difference, that is, the presence of itching.

Therefore, when assessing the intensity of itching, the most practical diagnostic tool was used – a visual analog scale with an emphasis on determining the average intensity of itching during the last day and the strongest degree of intensity of this sensation during a similar period. The average indicator of the severity of itching according to the VAS for the first group was 5.60 ± 0.21 , for the second – 1.90 ± 0.27 , and the criterion for the maximum degree of intensity of this sensation was 6.30 ± 0.55 and 2.07 ± 0.31 in the relevant samples (Fig. 1,2). Interpreting the obtained data, pruritus in patients of the main group meets the criteria of a moderate sensation and is significantly more pronounced in comparison with the group of patients with only skin lesions ($p < 0.0001$).

The presence of both an isolated skin lesion and comorbidity due to pruritus have an impact on the mental state of this cohort of patients. That is why the assessment of psychopathological symptoms in such persons is an important step. As can be seen from Table 1, patients with psoriasis and pruritus have a higher GSI score, unlike the comparison group, with a significant effect on the value of this criterion for most groups of psychopathological symptoms, except hostility and paranoid ideation.

According to the data presented in Table 2, the leading indicators affecting the severity of psychopathological mani-

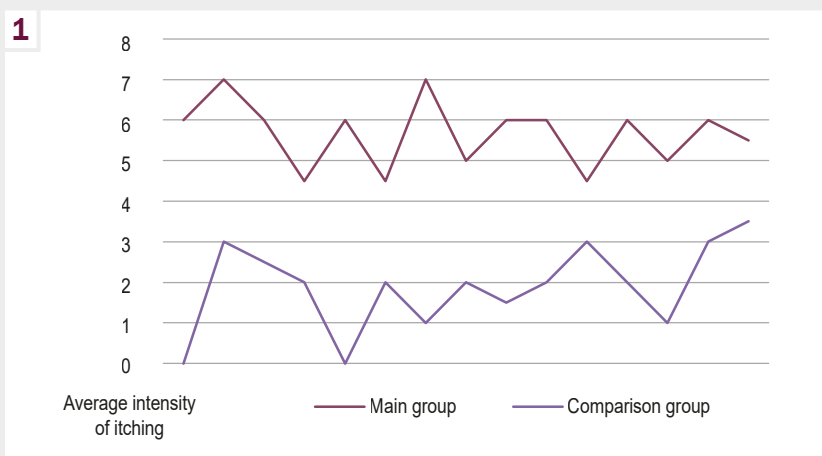


Fig. 1. The indicator of the average intensity of itching among patients of the main and the comparison group according to the data of the assessment of the visual analog scale.

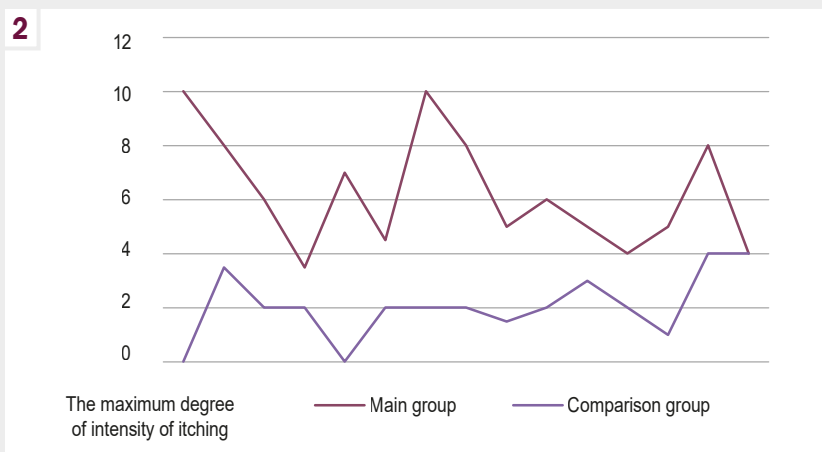


Fig. 2. The indicator of the maximum degree of itching among patients of the main and the comparison group according to the data of the assessment of the visual analog scale.

festations in patients with psoriasis in association with pruritus, at the level of functional connection, are obsessive-compulsive symptoms ($r = 0.92$, $p < 0.05$), while the following features have a strong correlation: depression ($r = 0.87$, $p < 0.05$), paranoid ideation ($r = 0.85$, $p < 0.05$), psychoticism ($r = 0.83$, $p < 0.05$), hostility ($r = 0.78$, $p < 0.05$), anxiety ($r = 0.78$, $p < 0.05$), phobic anxiety ($r = 0.73$, $p < 0.05$) and interpersonal sensitivity ($r = 0.74$, $p < 0.05$). Symptoms of somatization are less crucial, but still with a moderate strength of correlation ($r = 0.64$, $p < 0.05$). In general, for the main group, the trend of reliable involvement to a greater or lesser degree of all groups of psychopathological symptoms in the involvement of the psychopathological aspect of the course of dermatosis with a pruriginous component became decisive.

At the same time, the comparison group with skin lesions without active itching showed less variability in dominant psychopathological symptoms. Analysing the obtained data from Table 3, very strong correlation strength with GSI is demonstrated by signs of interpersonal sensitivity ($r = 0.97$, $p < 0.05$) and strong by depression ($r = 0.89$, $p < 0.05$), phobic anxiety

($r = 0.89$, $p < 0.05$) and anxiety ($r = 0.87$, $p < 0.05$). As among individuals with dermatosis and pruritus, only moderate effects of somatization are present in patients with isolated skin changes ($r = 0.69$, $p < 0.05$).

The variability in the assessment of the quality of life in this cohort of individuals is presented as follows. Thus, the main group of patients with psoriatic skin lesions associated with itching demonstrates a moderate impact on vital activities with a median of 9.5 (9.5; 16.5). Those respondents with only dermatosis rated the impact on quality of life as slight discomfort – 3.0 (2.5; 5.5). As you can see, pruritus objectively creates an additional burden in terms of the daily high-quality functioning of a person ($p < 0.0001$).

Thus, the analysis of both groups of patients reflects the multicomponent nature of the interaction between dermatosis and pruritus, including clinical and psychological basis. The use of the visual analog scale and DLQI brings the practitioner closer to attempting to objectify pruritus as a separate condition and assess the level of clinical discomfort. On the other hand, the involvement of SCL-90-R allows us to determine the range and severity of

Table 1. Comparison of average indicators of psychopathological symptoms by subscales in study groups

SCL-90-R	Main group	Comparison group	p-criteria
SOM	1.21 ± 0.71	0.70 ± 0.36	<0.05
O-C	1.01 ± 0.43	0.56 ± 0.19	<0.05
INT	0.98 ± 0.49	0.58 ± 0.30	<0.05
DEP	0.91 ± 0.57	0.49 ± 0.51	<0.05
ANX	1.15 ± 0.59	0.42 ± 0.32	<0.05
HOS	1.10 ± 0.85	0.83 ± 0.65	>0.05
PHOB	0.47 ± 0.45	0.17 ± 0.24	<0.05
PAR	0.77 ± 0.70	0.47 ± 0.28	>0.05
PSY	0.65 ± 0.52	0.30 ± 0.24	<0.05
GSI	0.94 ± 0.46	0.51 ± 0.26	<0.05

Table 2. Matrix of correlations of psychopathological symptoms of the main group

Parameter	SOM	O-C	INT	DEP	ANX	HOS	PHOB	PAR	PSY
SOM	1	–	–	–	–	–	–	–	–
O-C	0.57*	1	–	–	–	–	–	–	–
INT	0.20	0.61*	1	–	–	–	–	–	–
DEP	0.43	0.69*	0.83*	1	–	–	–	–	–
ANX	0.35	0.81*	0.50	0.54	1	–	–	–	–
HOS	0.45	0.68*	0.84*	0.87*	0.37	1	–	–	–
PHOB	0.39	0.72*	0.58*	0.51	0.89*	0.42	1	–	–
PAR	0.49	0.72*	0.75*	0.92*	0.42	0.91*	0.42	1	–
PSY	0.43	0.89*	0.61*	0.63*	0.69*	0.72*	0.63*	0.78*	1
GSI	0.64*	0.92*	0.74*	0.87*	0.78*	0.78*	0.73*	0.85*	0.83*

*: valid values ($p < 0.05$).**Table 3.** Matrix of correlations of psychopathological symptoms of patients in the comparison group

Parameter	SOM	O-C	INT	DEP	ANX	HOS	PHOB	PAR	PSY
SOM	1	–	–	–	–	–	–	–	–
O-C	0	1	–	–	–	–	–	–	–
INT	0.66*	0.31	1	–	–	–	–	–	–
DEP	0.67*	0.22	0.80*	1	–	–	–	–	–
ANX	0.56*	0.62*	0.89*	0.57*	1	–	–	–	–
HOS	0.41	0.05	0.29	0.80*	0.02	1	–	–	–
PHOB	0.34	0.67*	0.86*	0.75*	0.86*	0.34	1	–	–
PAR	-0.10	-0.20	0.26	0.57*	-0.10	0.66*	0.34	1	–
PSY	-0.30	-0.10	0.15	0.45	-0.15	0.56*	0.33	0.97*	1
GSI	0.69*	0.40	0.97*	0.89*	0.87*	0.46	0.89*	0.30	0.20

*: valid values ($p < 0.05$).

psychopathological symptoms. This approach contributes to the possibility of individualizing the management of dermatosis against the background of a comprehensive assessment of the patient's general condition.

Discussion

Pruritus is not a pathognomonic sign of psoriasis, but in the modern dermatological discourse, its influence on both the course of dermatosis and the quality of life of patients is recognized as being underestimated. A survey by the National Psoriasis Foundation showed striking data: more than a third of respondents had never been asked about itching or pain associated with the underlying dermatosis [14]. At the same time, the prevalence of pruritus in such patients is not uncommon, with data fluctuating depending on the population. In some studied samples, the frequency of this phenomenon registration is from 60 % to 90 % [15,16].

Of course, clinical and demographic features should be taken into account when assessing this condition. The female population also became dominant (60.5 %) for the presence of moderate to severe pruritus in the study by R. Sommer et al. [17]. Whereas in our work, men are the predominant contingent in both groups. This may be due to social conditions and migration processes during martial law.

It is worth emphasizing the correlation between the severity of the course of dermatosis and its clinical manifestations with the presence and intensity of pruritus. According to S. H. Morariu et al., the manifestation of itching was more often observed in the studied group in patients with manifestations of plaque psoriasis (88.69 % of cases) with a total median PASI index of 7.00 (5.51; 9.48), pointed out the reliable dependence of the presence of this phenomenon and the degree of involvement skin to the pathological process [18]. The presence of this clinical form and the spread of the pathological process on the skin can potentially act as predictors of the need for evaluation and analysis of itching in patients with psoriasis [17,19]. The results we obtained are comparable both in terms of absolute dominance of vulgar plaque psoriasis among clinical forms of dermatosis and in terms of statistically significant difference of PASI in the main group and the comparison group.

In general, as in our research, complaints of itching are most often associated with the appearance of efflorescences on the limbs, trunk, and scalp. In this study, complaints about the appearance of rash elements both without and in combination with itching in the genital area were not recorded, nevertheless, it is not necessary to ignore this anatomical area both during the collection of anamnesis and during the clinical examination. Thus, the study by P. Watchirakaeyoon et al. demonstrates that in cases of genital psoriasis, subjective sensations in the form of itching, tingling/burning, and pain are quite significant, which negatively affects the daily activities of people with this problem, including manifestations of sexual dysfunction [20].

It is quite difficult to unify the characteristics of itching as a phenomenon, taking into account the individuality of the sensory experience of each patient. Nevertheless, the sensation of pruritus in psoriasis in most cases, both in our study and in

the works of other scientists, is limited to areas of the affected skin, fluctuating in intensity during the day with an increase in the evening/night and stress aggravation [18,21]. Different synonyms are used by patients to describe this symptom: "discomfort", "burning" or "tingling", which further complicates the systematization of itching as a separate independent process. However, with palmoplantar lesions, patients described this sensation as painful and deep [22].

The concept of alexithymia as difficulties with expressing one's feelings is considered to a greater extent in the context of psychogenic pruritus [23]. However, the understanding of this condition in the case of the appearance of itching in chronic inflammatory dermatoses in patients with disorders of the psychopathological profile requires a deeper analysis. Tsiori S. et al. indicate that patients with psoriasis and alexithymia are six times more likely to receive higher scores on one of the psychopathology scales than patients without this phenomenon [24].

Considering the heterogeneity of the above-mentioned characteristics, the objectification of itching remains an important issue. The simplest, in our opinion, but the valid method of its assessment remains the visual analog scale. Thus, in this study, a statistically significant difference is determined according to the indicators of this scale among the subjects of the main and comparison groups. It allows not only to evaluate of the severity of pruritus but also to control its intensity during the dynamic curation of the patient.

Psychopathological comorbidity, in terms of depression, anxiety, or dysmorphophobia, has a pronounced effect on the course of dermatosis both in the presence and in the absence of a pruriginous component [2,25,26]. Studies evaluating the variability of psychopathological symptoms based on SCL-90-R data are quite limited. The main array of scientific works is dedicated to the comparison of cohorts of people without dermatosis and with clinically significant changes in the skin represented by psoriatic efflorescences. So, according to X. Li et al., patients with psoriasis showed higher rates of depression, anxiety, obsessive-compulsive states, somatization, interpersonal relationships, and sensitivity, with no difference in paranoid ideation and psychoticism phenomena between the studied groups [27].

In our study, the division into groups was not based on the principle of presence / absence of skin lesions but based on the dominance of pruritus. Accordingly, when comparing both groups according to the subscales of existing distress, as can be seen from *Table 1*, the influence of all symptoms, except for hostility and paranoid ideation, is statistically significant. GSI scores among a sample of patients with dermatosis associated with pruritus are quite variable. Gupta et al., in addition to the emphasis on depressive components, indicate that the intensity of itching is inversely proportional to the obsessive-compulsive spectrum of symptoms and manifestations of phobic anxiety [28].

This can be explained by the fact that patients with moderate itching focus more on intrusive thoughts or, for example, anxiety about surrounding events, than those in whom itching reaches the highest intensity. According to the data of R. Conrad et al. in psoriasis, the general symptom severity index showed higher rates of emotional distress, anxiety, and depression, and the

latter became the only significant predictor of the severity of pruritus [29].

According to our data obtained in the course of calculating the correlation between individual groups of symptoms and the general index of severity for the first group, obsessive-compulsive phenomena ($r = 0.92$, $p < 0.05$) are the most significant in the psychopathological aspect of the course of dermatosis with itching. This thesis confirms the importance of the obsessive urge to scratch, which creates an additional burden in the clinical course of psoriasis, as well as the psycho-emotional adaptation of the patient. Whereas for patients in the group with only dermatosis and no pronounced itching, the leading role belongs to the symptoms of interpersonal sensitivity ($r = 0.97$, $p < 0.05$). The presence of skin lesions directly affects difficulties in social interaction and complicates career development, and intimate relationships, which ultimately leads to the formation of negative identification. According to the research results, a clear connection between the presence of psoriasis and the prevalence of stigmatization is also confirmed, taking into account socio-gender prerequisites [30,31].

Looking at the internal correlation between groups of symptoms in the respondents of the main group, attention is drawn to the strong correlation between obsessive-compulsive symptoms and anxiety ($r = 0.81$, $p < 0.05$) and psychoticism ($r = 0.89$, $p < 0.05$). Anxiety is a known trigger for obsessive phenomena and compulsions, including those associated with itching, demonstrating a direct dependence. The relationship with the scale of psychoticism, taking into account clinical observations, indicates on the one hand the avoidant behaviour of respondents with itching, on the other – their unwillingness to fill in forms with emotional, sensitive, and cognitive introspection. Patients without a potential subjective trigger in the form of pruritus do not have a significant correlation with most symptoms except phobic anxiety ($r = 0.67$, $p < 0.05$) and anxiety ($r = 0.62$, $p < 0.05$) with average values of such interaction.

The strong correlation between interpersonal sensitivity and symptoms of depression is indicative ($r = 0.83$, $p < 0.05$) and phobic anxiety ($r = 0.84$, $p < 0.05$) in patients of the main group. In our opinion, the basis of this relation is social stigmatization, vulnerability, and changes in interpersonal interaction among patients with psoriasis burdened by pruritus, which in turn leads to impaired adaptation, and irrational avoidance behaviour with manifestations of a depressive component. The latter, according to the psychodiagnostic interview, is manifested by a lack of desire to communicate with others and, a loss of motivation and interest in life. In the subjects of the comparison group, in addition to the correlation of interpersonal sensitivity with depression ($r = 0.80$, $p < 0.05$) and phobic anxiety ($r = 0.86$, $p < 0.05$), described above and for patients with psoriasis and itching, additionally, there is an interaction with anxiety ($r = 0.89$, $p < 0.05$). It is the last group of symptoms that complements the anxiety-depressive spectrum of psychopathological phenomena against the background of personal discomfort and self-blame in the context of the presence of skin lesions.

In turn, the group of depressive symptoms correlates with manifestations of hostility ($r = 0.87$, $p < 0.05$) and paranoid ideation ($r = 0.92$, $p < 0.05$) at a significantly high level in the main

group. The existing correlation between the above-described manifestations of the depressive state has a connection with outbreaks of aggression in the context of clinical observation of these individuals. In the general structure of psychopathological manifestations against the background of a reduced emotional state, there are explosive reactions of anger, dissatisfaction, indignation, and aggression about various triggers: from the conditions of stay in the hospital to "inattentive", in the words of the patient, care by medical personnel.

Most often, in this category of persons, such episodes are associated, first of all, with the lack of a quick therapeutic effect on the intensity of pruritus, rather than on the resolution of the rash. The continuation of this state is paranoid ideation, which, against the background of outbreaks of hostility, is characterized by excessive suspicion and mistrust of both the correct diagnosis of one's condition by doctors and the prescribed therapy. Itching in this sample, as a leading symptom, prompts them to think about the presence of a more serious disease, which everyone around hides. Among patients in the comparison group, the correlation between depressive symptoms and hostility is also quite strong ($r = 0.80$, $p < 0.05$). According to the results of a clinical psychopathological interview, in this group of persons, in contrast to patients with pruritus, emotionally coloured behavioural episodes are associated with dissatisfaction with the slow dynamics of efflorescences towards resolution.

Anxiety symptoms are correlated with phobic manifestations for both the main ($r = 0.89$, $p < 0.05$) and the comparison group ($r = 0.86$, $p < 0.05$), when general concern about the condition of the skin, especially in the presence of a rash on parts of the body that are open to social inspection, leads to the appearance of a potential fear of publicity, any social interaction. But at the same time, for the patients of the first group, this concerns not only the embarrassment regarding the condemnation of the appearance but also the subjective aggravation of the feeling of itching at the moment of being among society.

An extremely strong level of correlation is also present among groups of symptoms of hostility and paranoid ideation ($r = 0.91$, $p < 0.05$) among patients with psoriasis and pruritus, where affective explosiveness is combined with suspiciousness. Some of these patients have disorders of associative thinking and aggressive behaviour, destructive thoughts.

The group of paranoid symptoms has strong ($r = 0.78$, $p < 0.05$) and extremely strong ($r = 0.97$, $p < 0.05$) correlations with psychoticism for the main and comparison groups, respectively. Such interaction indicates suspiciousness, and offensiveness against the background of manifestations of psychoticism, in this case, signs of alexithymia. Our study did not focus on aspects related to difficulties in recognizing and verbalizing one's feelings. However, according to clinical observations, some patients had difficulty describing complaints of a subjective profile against the background of suspicion regarding the detailing of this information by the doctor.

Symptoms of somatization reveal noticeable correlations in both groups, which allows them to be attributed to second-rank manifestations.

Summarizing the obtained clinical, anamnestic, and psychodiagnostic data, the fact is undeniable that pruritus is most often a manifestation of typical forms of psoriasis, but signifi-

cantly worsens the quality of life of patients, causing constant physical and psychoemotional discomfort. Therefore, it allows not only to single out itching as a priority component in the assessment of psoriatic disease but also to take into account its potential negative impact when choosing treatment tactics for such patients.

Conclusions

1. In patients with psoriasis accompanied by pronounced pruritus, in the presence of generally similar clinical manifestations (predominance of the plaque form), a more severe course of dermatosis is observed, which is manifested by a higher PASI compared to patients with psoriasis without active itching.

2. The difference in the influence of groups of psychopathological symptoms on the overall severity of psychopathological manifestations was determined. In patients with pruritus, the group of obsessive-compulsive symptoms is the most significant, while in the comparison group – symptoms of interpersonal sensitivity.

3. The features of the effect of pruritus on the clinical manifestations of dermatosis, the psychopathological state, and the quality of life of patients have been identified, making it necessary to better diagnose the pruriginous component and change approaches to the personalized therapy of this cohort.

Prospects for further research consist in the formation of an algorithm for the complex management of pruritus in patients with chronic inflammatory dermatosis, taking into account the degree of involvement of neurovegetative, inflammatory, and/or psychopathological mechanisms of its formation.

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