

PSYCHOLOGICAL CHARACTERISTICS OF PATIENTS WITH PSORIASIS: OUR EXPERIENCE

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In consultative psychiatry, we have also noticed negative emotional reactions and mood disorders in patients with psoriasis. In this paper, we wanted to determine the presence of psychological symptoms and psychiatric disorders among patients with psoriasis and an association between psychological traits and severity of psoriasis.

We examined 30 patients with psoriasis, using a consecutive method of patient selection. The severity of psoriasis was determined by the PASI score. Psychological assessment was done by the application of an unstructured clinical interview, M.I.N.I, for psychiatric disorders as well as KON-6 inventory for psychological traits: extroversion, somatization, and neuroticism. Pearson's linear correlation was used to determine the relation between t-values of psychological dimensions and the values of PASI score.

One quarter of the sample had mild depression, anxiety and panic disorder. Patients with mild psoriasis had lower neuroticism, and those with extroversion had lower tendency to somatization.

Our patients described feeling tension, discomfort, and shyness due to their low self-esteem. A low degree of psychiatric comorbidity is probably due to the sample size.

Mild psoriasis is associated with low neuroticism, and further follow-up of the patients is needed to examine the psychological and medical outcome in relation to the severity of psoriasis.

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Key words: psoriasis, psychological characteristics

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Introduction

In the field of liaison psychiatry, psychodermatology deals with a psychological aspect of dermatologic disorders. Skin and nervous system have mutual embryonic origin, enabling psychophysiological mechanisms to disturb the neuro-immuno-endocrine functions and take part in dermatologic disease (1).

Psychodermatology refers to the three groups of disorders:

1. Dermatological conditions that are worsened or initiated by stress: urticaria, alopecia areata, psoriasis, acnae, dermatitis saeborrhioica.

2. Psychiatric conditions with dermatologic consequences due to self-harming behavior: dermatitis artefacta, excoriation neurotica, trihotilomania.

3. Secondary developed psychological reactions to skin diseases affecting the appearance: negative emotions, psychiatric syndromes associated with vitiligo psoriasis, ichtiosis, tumors, and others changes of the exposed skin (face, neck, hands).

Psoriasis is a chronic inflammatory skin condition, and usually it is associated with psychological issues. During treatment, dermatologist is in a position to notice such changes in a patient's behavior as well as their emotional reactions. A connection between slow recovery, reoccurrences, and long duration of the disease with chronic distress and unfavorable life events is well known (2). Chronic distress, anxiety, depression, suppressed inner tension through limbic activation and hypothalamic-pituitary adrenal stimulation increase catecholamine and sympathetic autonomic function as well as cortisol dysfunction (3). Patients with psoriasis have increased stress response to social stressors and higher cortisol levels compared to healthy controls (4). This vulnerability to stress might increase the vulnerability to

the onset or worsening of psoriasis. The other important link is decreased brain-derived neurotrophic factor (BDNF) in psoriatic patients due to sensitivity to stress. This neurotrophin is important for neuroplasticity, neuronal growth, cognitive processing and coping mechanisms. Psychological stress could influence a decrease of BDNF in patient plasma (5). Negative emotions and distress reactions may precede the occurrence of the psoriasis or follow the illness as psychological consequences of disturbed look of their skin. Visible skin manifestations are the basis of lower self-esteem and psychopathological reactions, when psychological help is important.

In consultative psychiatry, we have also noticed negative emotional reactions and mood disorders in patients with psoriasis. In this paper, we wanted to determine the presence of subjective psychological symptoms and psychiatric disorders among patients with psoriasis. The second aim was to find an association between psychological traits and severity of psoriasis.

Material and methods

We have examined 30 patients with psoriasis of both genders, using a consecutive method of patient selection. They all had a chronic form of the disease diagnosed by a dermatologist in the previous 1-3 years. Participants gave their written consent for participating in the study. After their regular check-up in an ambulatory setting, the dermatologist determined the severity of the disease by the psoriasis area severity index (PASI) score. Light forms of disease were ranged 0-18, moderate 19-36, severe 37-54, very severe 55-72. Evaluation was based on the appearance of the lesion surface, the presence of erythema, and indurations and desquamation of the affected area. Then, the dermatologist referred patients to psychiatrist for further evaluation.

Psychiatric assessment included:

1. The use of unstructured clinical interview to get information about subjective psychological symptoms, their duration and intensity, and also to establish a therapeutic relation with patients. The participants fulfilled demographic questionnaire after the interview.

2. Mini International Neuropsychiatric Interview (6), (M.I.N.I.) is a questionnaire designed for diagnosing psychiatric disorders. Two psychiatrists used the scale to confirm the presence or absence of psychiatric disorder.

3. Neurotic personality inventory KON-6 test is a self-rated questionnaire (7) which includes the following subscales: ALFA (it measures the level of neuroticism and a tendency to anxiety reactions); EPSILON (the level of extroversion and energetic level of functioning) HI (tendency to somatization).

Our study is only part of wider research, considering psychiatric evaluation of other chronic inflammatory diseases. In this paper, we present only data of patients with psoriasis. An association with other diseases will follow.

We analyzed data by SPSS for Windows, vers-

ion 16. Pearson's linear correlation was used to determine a correlation between t-values of psychological dimensions and values of PASI score for the whole sample and in the subgroup with low PASI score.

Results

Our patients were in their thirties, most of them were men, unemployed, and almost two thirds of the sample had no emotional partner at the time of the assessment. According to M.I.N.I. and by comparing the diagnosis with criteria in the ICD-10 manual, over 70 % of participants had no psychiatric condition. Chronic mood disturbance (mild depression) was the most frequent diagnosis, while panic disorder was present only in one patient. A mild form of skin condition was present in one third of the subjects, whereas the rest of them had moderate and severe forms of psoriasis (Table 1).

Table 1. Demographic characteristic, psychiatric diagnosis, and PASI score of the participants

Variables	N(%)
	30
Age	32.33
Men	21 (70.00)
Living with partner	12 (40.00)
Employed	8 (26.66)
Without psychiatric disorder	22 (73.33)
Anxiety disorder	3 (10.00)
Dysthymia	4 (13.33)
Panic disorder	1 (3.33)
PASI <18	10 (30.00)
PASI (18-72)	20 (66.66)

We assessed the psychological characteristics of the subjects and compared their t-values too see a relation between psychological dimensions and PASI score in the whole group. The value of $p < 0.05$ was considered significant. Considering the whole sample, there was a correlation only between the psychological variables: extroversion (EPSILON) and tendency to somatization (HI), meaning that extroverts have lower tendencies to somatization (Table 2).

For further analysis, we divided the participants into two groups. The first group included patients with a mild form of psoriasis (PASI < 18). The second group included the moderately severe and very severe forms of the disease (PASI 19-72). We compared the severity of psoriasis with psychological dimensions. Only in subjects with the light form of psoriasis we found the same negative correlation between extroversion and tendency to somatization.

There was a negative correlation, with statistical significance, between low PASI score and ALFA score – neuroticism (Table 3). Subjects with mild psoriasis were less prone to neurotic (anxiety) reactions.

There was no correlation between the PASI score and psychological traits for the whole sample and for the more severe form of psoriasis.

Table 2. A correlation between psychological dimensions and PASI score for the sample

		EPS	HI	ALFA	PASI
EPSILON	Pearson's correlation	1.000	-0.545*	0.096	-0.112
	Sig. (2-tailed)	0	0.013	0.687	0.693
	N	30	30	30	30
HI	Pearson's correlation	-0.545*	1.000	0.394	0.231
	Sig. (2-tailed)	0.013	0	0.085	0.326
	N	30	30	30	30
ALFA	Pearson's correlation	0.096	0.394	1.000	0.195
	Sig. (2-tailed)	0.687	0.085	0	0.410
	N	30	30	30	30
PASI	Pearson's correlation	-0.112	0.231	0.195	1.000
	Sig. (2-tailed)	0.639	0.326	0.410	0
	N	30	30	30	30

EPSILON-Extroversion
 HI-somatization
 ALFA-neurozicism
 PASI- psoriasis area severity index

Table 3. A correlation between PASI score and psychological characteristics in the group with a light form of psoriasis

		EPS	HI	ALFA	PASI
EPSILON	Pearson's correlation	1.000	-0.674*	0.028	-0.294
	Sig. (2-tailed)	0	0.033	0.939	0.410
	N	10	10	10	10
HI	Pearson's correlation	-0.674*	1.000	0.572	-0.194
	Sig. (2-tailed)	0.033	0	0.084	0.591
	N	10	10	10	10
ALFA	Pearson's correlation	0.028	0.572	1.000	-0.500*
	Sig. (2-tailed)	0.939	0.084	0	0.135
	N	10	10	10	10
PASI<18	Pearson's correlation	-0.294	-0.194	-0.500*	1.000
	Sig. (2-tailed)	0.410	0.591	0.135	0
	N	10	10	10	10

EPSILON-Extroversion
 HI-somatization
 ALFA-neurozicism
 PASI- psoriasis area severity index

Discussion

In our consultative psychiatry practice, we have noticed some psychological issues coexisting

with psoriasis, particularly in forms affecting uncovered parts of the body. A chronic skin disease has a negative impact on the appearance and quality of life and may precipitate psychological reactions or

psychiatric comorbidity. The researches in this field accentuate that vulnerability to stress contributes to maintenance of the skin disease and mental health problems as well (8). Our group of patients had chronic skin condition in the most active period of their lives. Still, most of them were neither married nor had a partner. This could be a result of their prudency and insecurity in social relations due to the appearance of their skin. Psychiatric interview included the questions about emotional reactions to everyday situations, unfavorable events in their lives, and the onset or exacerbation of psoriasis. Most of the subjects could not associate the beginning of the disease with a particular stress event, but with precipitating undesirable circumstances and chronic distress. This finding is different from the research of Hunter et al. from 2013 (2). They found a temporal relationship between stress events and exacerbation of psoriasis. Similar findings reported in Scandinavian research (9) showed subjective association between acute distress and exacerbation of psoriasis. Their subjects also emphasized anxiety traits, lack of assertiveness and depression. Our patients described feeling tension, discomfort, and shyness due to their low self-esteem. According to the psychiatric interview, they also have less coping abilities in social situations. In younger patients, we have noticed a tendency to social isolation and stigmatization, even with mild and moderate forms of the disease. Anxiety is the main symptom of distress reactions and neurotic disorders. Considering anxiety disorders, only one patient had panic attacks with secondary agoraphobic complication and avoidance behavior. He avoided leaving home due to a fear of fainting, but on a deep psychological level due to shame and fear of rejection because of his physical appearance. Chronic anxiety was present in 10% of the sample. The patients were prone to emotional hypereactivity to everyday problems. Their sensitivity in social relations and general inhibition are the basis of a tendency to distress reactions. Skin discomfort, scratching and itching were accompanied with worry, emotional tension and general anxiety, as was found in a prospective study of Verhoeven et al. from 2009 (10). In our sample, 13% of patients had a chronic mood disorder - mild depression, with subjective evaluation of the coexisting depression and exacerbation of psoriasis. This result differs from those of large studies because of the small sample. In a Danish study (11), five million people were evaluated for depression. Individuals with severe form of psoriasis and with other medical comorbidity had a greater risk for the onset depression in a five-year prospective follow-up. In another cohort study done in the United Kingdom, patients with severe psoriasis were at greater risk of depression, anxiety and suicidality (12). The investigators concluded that

early detection and treatment of psychiatric disorders is important for better control of the disease. Our patients were young adults, without other medical condition at the time of the assessment, but future evaluation of the same group may show a different medical and psychiatric outcome.

We expected more patients with a psychiatric diagnosis, but the majority of patients with psoriasis had some psychological symptoms, without fulfilled criteria for psychiatric disorders. A small number of respondents may be the reason for only few psychiatric syndromes associated with psoriasis. In order to determine the psychological characteristics of our patients, we used a KON-6 questionnaire and measured some personality traits: neuroticism, extroversion, and somatization. There was no correlation between t-values of the tests and PASI score. In our sample, we did not detect a relationship between the severity of psoriasis and some personality dimensions. Analysis of the subgroup PASI < 18 showed that less neuroticism was associated with a light form of the skin condition. We can assume that in a larger sample, moderate and severe psoriasis would be in relation with higher neuroticism. Considering other two dimensions, our patients with a tendency to extroversion had less somatization. The former psychological characteristic is a typical mechanism present in psychosomatic disorders, meaning that psychological stress is experienced on the somatic level of functioning (13), contributing to somatic/dermatological illness and quality of life (14). In our further evaluation, we will see if subjects with extroversion have better prognosis in relation to subjects with a tendency to somatization.

A limitation of our study is a small number of respondents and lack of a prospective follow-up of patients. Our experience in consultative psychiatry indicates the presence of negative emotions in patients with psoriasis, often of subclinical level, without a diagnosis of a psychiatric condition. These results point to the necessity to analyze a larger number of patients with different forms of psoriasis in order to evaluate the impact of psychological characteristics on the prognosis and quality of life. Stress reduction intervention (15) and counseling can be helpful for improving their psychological issues and a possible course of a skin condition.

Conclusion

Our patients with psoriasis had a low degree of psychiatric comorbidity, mild depression and anxiety disorders. Psychological symptoms in the majority of patients are: somatic tension, worry, and insecurity in social relations. Patients with a light form of psoriasis had less neuroticism.

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PSIHOLOŠKE KARAKTERISTIKE BOLESNIKA SA PSORIJAZOM: NAŠA ISKUSTVA

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U konsultativnoj psihijatrijskoj praksi primetili smo negativne emocionalne reakcije i poremećaje raspoloženja kod bolesnika sa psorijazom. U našem radu smo želeli da utvrdimo prisustvo psiholoških simptoma i psihijatrijskih poremećaja među bolesnicima sa psorijazom i odnos između psiholoških crta i težine psorijaze.

Pregledali smo 30 ambulantnih bolesnika sa psorijazom po metodi uzastopnih odabira. Težinu psorijaze smo odredili putem PASI skora. Za psihološko ispitivanje smo upotrebili: nestrukturirani klinički intervju, M.I.N.I. upitnik za postavljanje psihijatrijske dijagnoze, KON-6 inventar za određivanje crta ličnosti. Pirsonovom linearnom korelacijom smo odredili odnos između t-vrednosti psiholoških dimenzija sa vrednostima PASI skora.

Četvrtina uzorka je imala blagu depresiju, anksiozni i panični poremećaj. Bolesnici sa blagom formom psorijaze su imali manji neuroticizam, oni sa ekstroverzijom su imali manje izraženu somatizaciju.

Naši bolesnici su zbog niskog samopoštovanja osećali napetost, nelagodnost, stidljivost. Mali psihijatrijski komorbiditet je verovatno zbog malog uzorka ispitanika.

Blaga psorijaza je povezana sa manjim neuroticizmom i potrebno je dalje praćenje ispitanika da bi se ispitao psihološki i medicinski ishod u odnosu na težinu psorijaze.

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Ključne reči: psorijaza, psihološke karakteristike