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PSYCHOLOGICAL PATTERNS FOR STRESS RELEASE IN DERMATOLOGICAL PATIENTS WITH CHRONIC ITCH SYNDROME

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Abstract

The success of adaptation to a disease is determined by a number of psychological patterns, which include psychological defense mechanisms and coping strategies. **Materials and methods**. At medical center "Asklepius"during 2016-2018 years, 134 patients with dermatological disorders and chronic itching weree xamined. In research we used "Electronic calculator of chronic itching", WCQ and LSI. **Results**. Patients with skin pathology and chronic itching experienced an increasing in level of coping and defense psychological mechanisms related to somatic distress. Not only quantitative but also qualitative changes in the structure of coping and defense psychological mechanisms in persons with intense itching were observed. This is characterized by the use of inefficient coping strategies and forms of psychological tension transformation. **Conclusions**. The maladaptive coping profile and low adaptive psychological defense mechanisms are important targets for psychological help to dermatological patients with chronic itching.

Key words: **coping, psychological defense mechanisms, dermatology, psychodermatology, chronic itching, psychological help.**

Urgency. Somatic diseases cause the appearance of varying intensity of mental stress, which depends on the disease (severity, prognosis, clinical manifestations), as well as on the subjective assessment of its importance for the individual. The success of adapting to a

stressful situation is determined by the peculiarities of psychological patterns of stress management, which are primarily psychological defense mechanisms and coping strategies.

Dermatological disorders do not usually carry a vital threat, but are accompanied by a number of significant distressing factors, including unpleasant physical sensations - pain, itching, feeling of burning, paresthesia, as well as changes in appearance and, accordingly, influence on self-perception and“ I-image».

Chronic itching (CI) is defined as the feeling of discomfort in the form of a constant desire to scratch a skin that lasts more than 4-6 weeks [1]. Itching is a clinical symptom that can occur in various somatic and mental pathologies, but it is one of the leading manifestations for dermatological pathology [2]. CI adversely affects the psycho-emotional state and quality of life of dermatological patients, decreases performance, impairs interpersonal relationships [3 - 6]. In a number of scientific papers CI is equated even to chronic pain syndrome [7, 8] on the intensity of discomfort. Adaptation of patients to life with a disease accompanied by CI also complicates treatment. If CI medication correction is impossible, psychopharmacotherapeutic agents and psychotherapy are added to the classical therapeutical regimens [9, 10].

Identifying the features of coping with stress and transformation of mental stress caused by the disease in somatic network patients is one of the most important tasks of medical psychology, which is associated with patients' commitment to the treatment and prevention of mental disorders.

The objective: to investigate the features of stress-coping behavior and psychological mechanisms of protection in dermatological patients with chronic itching syndrome.

Contingent and research methods. 134 patients with dermatological pathology accompanied by CI syndrome of different severity were examined during 2016-2018 on the base of “*Asclepius”* Medical Center (Uzhgorod). Examination was made under the conditions of PIC. The study engaged 84 atopic dermatitis patients, 32 psoriasis and 18 seborrheic dermatitis ppatients. Women prevailed and accouted for 65.7%, men - 34.3%.

Based on the computer supplement application “Electronic Chronic Itching Calculator”, the patients were divided into 3 groups depending on the degree of CI manifestation: low intensity group (LI; n=42, 31.3%); group of medium intensity (MI; n = 55, 41.0%) and high intensity group (HI; n = 37, 27.6%).

“Ways of Coping Questionnaire” (WCQ) by R.Lazarus and S. Folkman was used together with“ Life Style Index” (LSI) methods of diagnostics by R. Plutchik and H. Kellerman. For statistical processing of the data obtained MS Excel v.8.0.3. was used.

Results and Discussion. Coping profile of dermatological patients with CI syndrome regardless of nosology was characterized by a reliance on social support (external resource), tendency to distance from or avoid stress, self-criticism (Table 1). Strategies aimed at positive reassessment, problem solving, self-control, and confrontation were less pronounced.

Table 1

The severity of coping forms in CI patients according to nosology, x ± m (points)

Scales	Atopic dermatitis, n = 84	Psoriasis, n = 32	Seborrheic dermatitis, n = 18
Confrontation	51.5 ± 10.1 51.5 ± 10.0	51.4 ± 10.7	51.5 ± 10.0
Distancing	58.9 ± 12.5	57.1 ± 12.3	53.7 ± 9.5
Self-control	51.7 ± 10.7	49.0 ± 7.5	47.6 ± 6.9
Social support	69.1 ± 12.4	68.2 ± 14.2	67.6 ± 11.3
Responsibility	60.2 ± 12.7	60.9 ± 12.2	63.0 ± 11.9
Avoidance	59.3 ± 11.6	56.9 ± 13.6	57.9 ± 11.4
Problem Solution	49.9 ± 11.4	49.0 ± 8.7	48.1 ± 7.9
Positive revaluation	48.6 ± 11.0	48.7 ± 8.1	47.9 ± 8.2

CI syndrome intensity increase was accompanied by intensity increase of confrontation coping strategies (48.4 ± 10.4 points in LI, 51.1 ± 10.2 points in MI and 55.4 ± 8.6 points in HI, $p<0.05$), distancing (53.4 ± 12.09 points, 58.5 ± 12.0 points and 61.7 ± 11.3 points, $p<0.05$) and avoidance (55.4 ± 11.9 points, 58 , 5 ± 12.2 points and 62.2 ± 11.1 points, $p<0.05$), and self-control (53.9 ± 9.8 points, 50.6 ± 9.6 points and 46.5 ± 8.2 points, $p<0.05$) decrease, Table. 2.

Table 2

The severity of coping forms, depending on the intensity of CI, x ± m

Scales	CI low level, LI, n=42	CI medium level, MI, n=55	CI high level, HI, n=37
Confrontation	48.4 ± 10.4 *	51.1 ± 10.2 *	55.4 ± 8.6 *
Distancing	53.4 ± 12.09 *	58.5 ± 12.0 *	61.7 ± 11.3 *
Self-control	53.9 ± 9.8 *	50.6 ± 9.6 *	46.5 ± 8.2 *
Social support	65.9 ± 11.1	68.4 ± 12.5	72.4 ± 13.8
Responsibility	59.1 ± 10.0	60.8 ± 12.3	62.6 ± 14.9
Avoidance	55.4 ± 11.9 *	58.5 ± 12.2 *	62.2 ± 11.1 *
Problem solution	51.7 ± 11.5	49.3 ± 9.1	47.0 ± 10.4
Positive revaluation	50.2 ± 11.6	48.1 ± 9.4	47.2 ± 8.9

Note: * $p<0.05$.

Tables 3-5 list the results of coping strategies expression for individual nosologies - atopic dermatitis, psoriasis, seborrheic dermatitis, which did not show significant intragroup difference depending on CI intensity.

Table 3

The severity of coping forms depending on CI intensity in atopic dermatitis patients, x ± m

Scales	CI low level, n=26	CI medium level, n=32	CI high level, n=26
Confrontation	48.7 ± 10.7	50.9 ± 9.3	54.9 ± 9.7
Distancing	54.1 ± 12.5	60.2 ± 12.6	62.2 ± 11.3
Self-control	55.9 ± 10.4	51.6 ± 11.1	47.6 ± 9.3
Social support	65.8 ± 11.3	68.8 ± 11.4	72.9 ± 14.1
Responsibility	58.3 ± 9.4	60.2 ± 13.7	62.2 ± 14.4
Avoidance	55.4 ± 11.3	59.5 ± 11.4	62.8 ± 11.3
Problem solution	52.4 ± 13.2	50.0 ± 9.9	47.2 ± 11.0
Positive revaluation	50.0 ± 13.6	48.2 ± 1.3	47.6 ± 9.1

Table 4

Severity of coping forms depending on CI intensity in psoriasis patients, x ± m

Scales	CI low level, n=9	CI medium level, n=16	CI high level, n=7
Confrontation	46.9 ± 11.1	51.7 ± 11.8	56.3 ± 5.0
Distancing	52.5 ± 13.1	56.9 ± 11.0	63.5 ± 13.2
Self-control	51.9 ± 8.4	49.7 ± 7.4	43.5 ± 3.3
Social support	66.0 ± 13.4	68.1 ± 14.7	43.5 ± 3.3
Responsibility	59.3 ± 11.4	60.9 ± 10.9	63.1 ± 17.3
Avoidance	54.6 ± 14.5	56.8 ± 13.6	60.1 ± 14.0
Problem solution	51.2 ± 9.1	48.6 ± 8.2	46.8 ± 10.1
Positive revaluation	51.3 ± 6.6	47.9 ± 8.4	46.9 ± 9.3

Table 5

The severity of coping forms depending on CI intensity in seborrheic dermatitis, patients x ± m

Scales	CI low level, n=7	CI medium level, n=7	CI high level, n=4
Confrontation	49.2 ± 9.3	50.8 ± 12.2	56.9 ± 7.0
Distancing	52.4 ± 9.5	54.0 ± 11.4	55.6 ± 7.9
Self-control	49.0 ± 8.1	48.3 ± 7.0	44.0 ± 4.6
Social support	65.9 ± 8.7	67.5 ± 14.1	70.8 ± 12.3
Responsibility	61.9 ± 11.6	63.1 ± 9.4	64.6 ± 18.5
Avoidance	56.0 ± 12.7	57.7 ± 13.7	61.5 ± 4.0
Problem solution	50.0 ± 7.9	47.6 ± 7.8	45.8 ± 9.5
Positive revaluation	49.7 ± 9.1	47.6 ± 8.2	45.2 ± 8.2

Domination in dermatological patients such coping strategies as distancing and avoidance indicated low stress resistance due to their poor efficacy, because the distancing from stress stimulus could not guarantee situation's change, as opposed to more effective ways - positive rethinking and problem solution. Reliance on the external resource, which was the patient's environment, with taking into account low level of self-control, tendency to self-criticism formed unstable intrapersonal anti-stress basis.

The profile of psychological mechanisms of protection in CI dermatological patients was determined by the negation of stressed objects, the displacement of psycho-traumatic stimuli, fantasizing, search for subjects for positive identification, rationalization, tendency to transform stress through displacement, projection or transition to more primitives general mechanisms (Table 6).

Table 6

Tension of psychological defense mechanisms in CI patients according to nosology, x ± m (points)

Scales	Atopic dermatitis, n=84	Psoriasis, n=32	Seborrheic dermatitis, n=18
Objection	68.4 ± 14.4	67.9 ± 14.7	67.6 ± 11.7
Displacement	62.7±17.0	66.4 ± 16.4	65.8 ± 13.0
Regression	54.9 ± 13.9	55.9 ± 15.8	59.7 ± 11.9
Compensation	70.07±14.0	68.7 ± 15.5	69.3 ± 12.3
Projection	55.7±14.2	56.5±11.2	58.1±10.8
Substitution	56.2 ± 12.1	56.3 ± 11.8	58.1 ± 10.8
Intellectualization	65.2 ± 14.1	65.7 ± 12.9	63.7 ± 9.8
Reactive formation	54.3 ± 13.3	54.6 ± 13.2	57.8 ± 11.4

Under the influence of somatic stress in the form of CI, an increase in the intensity of psychological defense mechanisms (Table 7) was revealed.

- objection (64.7 ± 15.0 points in LI, 67.3 ± 14.3 points in MI and 73.5 ± 11.1 points in HI, $p<0.05$);

- displacement (60.1 ± 15.4 points, 63.5 ± 17.3 points and 69.3 ± 14.8 points, $p<0.05$);

- regression (50.7 ± 12.4 points, 54.3 ± 14.0 points and 63.9 ± 12.8 points, $p < 001$);

- projection (52.3 ± 12.7 points, 56.3 ± 12.3 points and 60.6 ± 13.8 points, $p<0.05$);

- substitution (51.8 ± 12.8 points, 56.8 ± 12.2 points and 61.3 ± 13.1 points, $p< 0.01$);

- reactive formation (51.4 ± 13.3 points, 54.5 ± 13.2 points and 59.3 ± 11.3 points, $p<0.05$).

Table 7

Tension of psychological protection mechanisms depending on CI intensity, x ± m

Scales	Low intensity CI, n=42	Medium intensity CI, n=55	High intensity CI, n=37	p (stat.signif.)
Objection	64.7 ± 15.0	67.3 ± 14.3	73.5 ± 11.1	p<0.05
Displacement	60.1 ± 15.4	63.5 ± 17.3	69.3 ± 14.8	p<0.05
Regression	50.7 ± 12.4	54.3 ± 14.0	63.9 ± 12.8	p<0.001
Compensation	66.8 ± 15.4	70.1 ± 13.3	73.7 ± 13.1	None
Projection	52.3 ± 12.7	56.3 ± 12.3	60.6 ± 13.8	p<0.05
Substitution	51.8 ± 12.8	56.8 ± 12.2	61.3 ± 13.1	p<0.01
Intellectualization	50.0 ± 7.9	47.6 ± 7.8	45.8 ± 9.5	None
Reactive formation	51.4 ± 13.3	54.5 ± 13.2	59.3 ± 11.3	p<0.05

Along with quantitative manifestations qualitative ones were revealed - change in the structure of psychological defense mechanisms, namely, increase of displacement, regression, projection, substitution and reactive formation role, which indicated decreased situational adaptability, use of less effective ways of mental stress transforming.

Tables 8 - 10 present data on the intensity of psychological defense mechanisms depending on CI intensity in different nosologies patients which did not show significant differences.

Table 8

Tension of psychological defense mechanisms depending on CI intensity in patients with atopic dermatitis, x ± m

Scales	Low level of CI, n=26	Medium level of I, n=32	High level of CI, n=26
Objection	65.5 ± 15.6	67.1 ± 15.1	73.1 ± 11.3
Displacement	58.2 ± 15.9	61.9 ± 17.6	68.4±16.3
Regression	49.3 ± 13.2	53.1 ± 13.1	62.8 ± 12.4
Compensation	67.5 ± 14.4	70.9 ± 12,0	73.8 ± 14.6
Projection	51.9 ± 13.8	55.2 ± 13.3	60.2 ± 14.9
Substitution	51.2 ± 13.5	56.3 ± 13.8	61.2 ± 13.7
Intellectualization	63.5 ± 13.7	64.8 ± 14.4	67.5 ± 14.3
Reactive formation	50.9 ± 13.8	53.9 ± 13.4	58.2 ± 12.0

Table 9

Tension of psychological defense mechanisms depending on CI intensity I

n patients with psoriasis, x ± m

Scales	Low intensity CI, n=9	Medoium intensity CI, n=16	High intensity CI, n= 7
Objection	61.4 ± 15.9	67.7±14.1	76.9±11.5
Displacement	63.9 ± 15.0	65.2±18.6	72.4±12.7
Regression	50.9±10.6	54.6±17.0	65.4±16.2
Compensation	65.0 ± 18.1	68.8 ± 16.3	73.0 ± 10.0
Projection	51.8 ± 12.2	57.1 ± 10.5	61.1 ± 10.9
Substitution	51.2 ± 11.3	56.9 ± 11.1	61.1 ± 13.2
Intellectualization	62.1 ± 15.2	65.7 ± 12.4	70.3 ± 11.3
Reactive formation	51.2 ± 11.6	54.2 ± 14.9	60.0 ± 10.8

Table 10

Tension of psychological defense mechanisms depending on CI intensity in patients with seborrheic dermatitis, x ± m

Scales	Low intensity CI, n=7	Medium intensity CI, n=7	High intensity CI, n=4
Objection	66.0 ± 12.9	67.9 ± 12.7	70.0 ± 10.4
Displacement	62.6 ± 15.2	67.0 ± 14.1	69.5 ± 7.5
Regression	55.3 ± 12.0	59.3 ± 11.1	68.3 ± 11.2
Compensation	66.4 ± 17.5	69.4 ± 8.0	74.3 ± 7.5
Projection	54.4 ± 10.7	59.9 ± 12.2	62.5 ± 13.7
Substitution	54.9 ± 13.4	58.7 ± 7.3	62.8 ± 11.8
Intellectualization	61.4 ± 11.7	63.9 ± 8.3	67.5 ± 9.8
Reactive formation	53.7 ± 14.8	57.9 ± 8.3	64.8 ± 7.5

In general, the profile of psychological mechanisms protection in dermatological patients was characterized by the use of ontogenetically more primitive and earlier forms, which resulted in reduced efficiency of mental tension transformation and, accordingly, overcoming of stress.

Conclusions. Patients with skin pathology and CI syndrome experience an increase in the intensity of coping strategies and psychological mechanisms of protection under the influence of somatic distress, which is a clinical symptom of itching.

In persons with intense itching, not only quantitative but also qualitative changes in the structure of stress-coping behavior and psychological mechanisms of protection are observed. This is characterized by the use of inefficient coping strategies and forms of transformation of psychological tension.

Correction of psychological patterns of stress management is an important component of a comprehensive program of medical and psychological care for patients with dermatological pathology and chronic itching syndrome.

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