

**ОРИГІНАЛЬНІ ДОСЛІДЖЕННЯ**DOI: 10.21802/artm.2022.2.22.6  
UDC 616-052+616.5-001.1**DISEASE COPING ISSUES IN PATIENTS WITH CHRONIC ALLERGIC SKIN DISEASES**

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**Abstract. Objective:** to analyze the way of a disease coping by adult patients with chronic allergic skin disease at new relapse start.

**Materials and methods.** 123 patients with Atopic dermatitis (AD) divided in two groups depending on age of the disease onset, 62 patients with Chronic true eczema (CTE) and 74 patients with Chronic infectious eczema (CIE) were examined. At first examination for current relapse of the disease precise medical history of the patients and clinical symptoms were registered, the disease severity evaluated with SCORAD index and itch severity scale. Disease coping issues and potential ability to cooperate with medical staff were investigated with "TOBOL" testing tool. Results were analyzed using parametric and nonparametric statistical tools.

**Results.** Disease coping types were different in examined research groups at the disease relapse start. Pure coping type that includes only one coping subtype was observed in part of each research group. Frequency of pure and combined disease copings was similar in CIE patient and AD patients with early age disease start.

Adaptive disease coping type is the most desirable for effective cooperation between a patient and medical staff. Adaptive coping subtypes were registered for all research patients as an example of pure adaptive type or in combinations with maladaptive ones. Harmonic and ergopathic (realistic) disease coping were observed in all research patients' groups. The highest frequency of harmonic was observed for CIE patients and lowest for AD patients with start in aduly. The highest frequency of ergopathic coping was in AD patients with start in aduly. Anosognostic (euphoric) was registered in eczema patients only.

Maladaptive coping types are usually associated with impaired cooperation between a patient and medical staff due to changes in emotional-effective sphere. Depression, anxiety, "escape to disease", refusal to fight with a disease are frequent issues. Different subtypes of maladaptive coping vary in the way they impact patient's compliance. Anxious disease coping was more common for AD patients with start in aduly, neurasthenic one for CTE patient, melancholic one was observed for all research groups with similar frequency, hypochondriacal coping was less common for CIE patients, apathetic one was not common for adult type AD and CIE patients.

**Conclusions.** Disease coping by a patient may significantly impair patient's compliance, objectiveness of a medical staff, effectiveness of examination and treatment. Chronic course of skin disease, age of the disease onset may influence the way of this coping. Due to that it should be taken in account while examination and treatment to provide better patient's compliance and disease management results. Pure type of disease coping is not the commonest situation at chronic allergic skin diseases and was observed in less than 40% of research groups. Adaptive disease coping by a patient is a good situation for medical staff and hopefully was registered often in researched groups. Realistic coping as the best prognosis for patient's compliance we dominantly observe in CIE and CTE patients with the lowest rate in AD patients with start at aduly. Maladaptive coping was often observed not as a pure type but in combination with at least one adaptive subtype.

**Keywords:** atopic dermatitis, chronic eczema, disease coping.

**Introduction.** Constant increase of allergic diseases morbidity [1] including allergic skin problems in the world [2] is a reality of last decades. Atopic dermatitis (AD) stays to be the most evident example of allergic problem of increasing morbidity [3]. Together with chronic cases of eczema they significantly impact routine lifestyle, social relations, educational process, and ability to work and rest both in children and adults [4,5]. AD onset may take place in early childhood, puberty or in adulthood due to different backgrounds of the disease. Eczema mostly starts in adults due to different reasons. Different age of a disease onset together with its duration, patient's sex, occupational and family history influence personal experience of "living with a disease" or "coping" in a different

way. Management effectiveness of patients with chronic skin disease may significantly depend on this issue.

**Background of the research.** Relation between chronic allergic skin disease aggravation and emotional stress is a well-known phenomenon. Strength of this relation is speculated to be dependent on a disease coping. The coping is strongly individual acceptance of a disease impact to personal health stage, family and social relations, financial and occupational issues. This combined acceptance may significantly influence ability of a patient to follow medical recommendations and get treatment results appropriate to a situation from a physician's point of view. Results of clinical studies prove that part of patients do not follow medical prescriptions in a proper way [6,7].

Understanding of personal way of a disease coping by a patient may give a physician ability to predict effectiveness of treatment and follow up.

**Objective:** to analyze way of a disease coping by adult patients with chronic allergic skin disease at new relapse start.

**Materials and methods.** 261 adult patients with relapse of the following chronic skin disease were examined: 123 patients with AD, 62 patients with chronic true eczema (CTE) and 74 patients with chronic infectious eczema (CIE). AD diagnosis was confirmed according to Ukrainian guidelines [8]. The AD patients were randomized in 2 groups depending on age of AD onset: 67 had AD symptoms start in early childhood and puberty, 56 – in adulthood. Erythroderma or steroid-dependent cases were excluded. At first examination for current disease relapse precise medical history of the patients and clinical symptoms were registered, and the disease severity evaluated with SCORAD index [9] and itch severity scale. Disease coping issues and potential ability to cooperate with medical staff were investigated with “TOBOL” testing tool (L.Wasserman, A.Vuks, B.Iovlev, 1987 with modifications of year 2001). Results were analyzed using parametric and nonparametric statistical tools of “Statistica 13.2” software.

**Results.** 67 examined patients (47 male and 20 female) with AD onset in early childhood or puberty (ADe) were aged between 18-48 years: 77,1% between 18 and 29, 15,4% between 30-39 and 7,5% between 40-48 years. At initial examination median SCORAD value (k) in the group reached 45(39;57) points: 28 (42%) patients had severe course of AD ( $k > 40$ ), 31 (46%) demonstrated moderate ( $20 < k < 40$ ), and 8 (12%) as mild ( $k < 20$ ). Median itch intensity in the group was 6(5;8) points from 10-points scale.

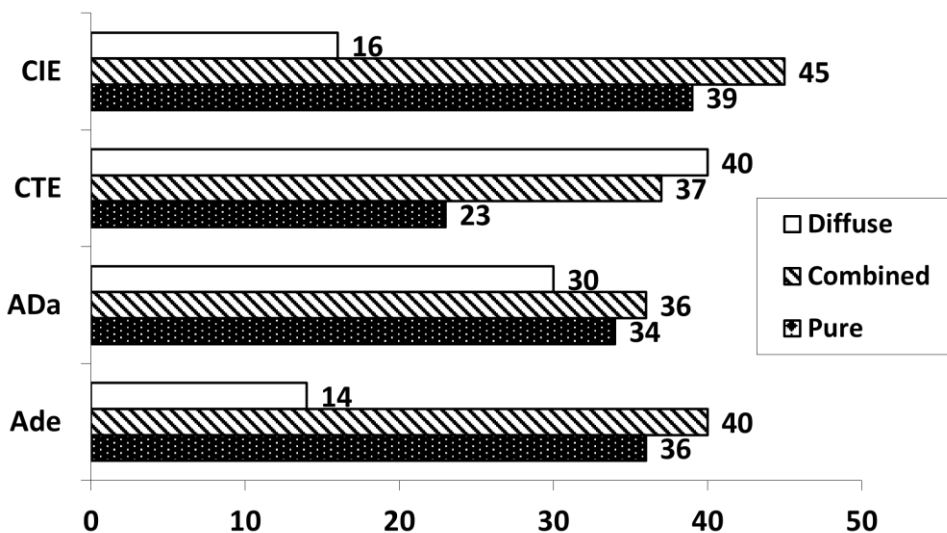
56 examined patients (43 male and 13 female) with AD onset in adulthood (ADa) were aged between 21-58 years: 5% between 21 and 29, 22% between 30-39, 33% between 40-49, and 41% between 50-58 years. Median SCORAD value in ADa patients at admission was 34,5(28;43,5) points: mild severity ( $k < 20$ ) in 18% patients, moderate ( $20 < k < 40$ ) – in 80%, and severe ( $k > 40$ ) in 1 research group patient. Itch intensity in the group was 6(4;7) points from 10-points scale.

62 examined patients (28 male and 34 female) with CTE were aged between 22-48 years: 28% between 21 and 29, 37% between 30-39, and 35% between 40-48 years. Median SCORAD value in CTE patients at admission was 37(25;47) points: mild severity ( $k < 20$ ) in 19% patients, moderate ( $20 < k < 40$ ) – in 74%, and severe ( $k > 40$ ) in 6 research group patients. Itch intensity in the group was 6(4;7) points from 10-points scale.

74 examined patients (48 male and 26 female) with CIE were aged between 18-62 years: 11% between 21 and 29, 31% between 30-39, 36% between 40-48, 22% between 50 and 62 years. Median SCORAD value in CIE patients at admission was 35(23;42) points: mild severity ( $k < 20$ ) in 19% patients, moderate ( $20 < k < 40$ ) – in 73%, and severe ( $k > 40$ ) in 8% of research group patients. Itch intensity in the group was 5(4;7) points from 10-points scale.

Resulting from preserved social and psychical adaptivity a disease coping by a patient is categorized in 3 major types each of them is divided into several subtypes depending of different registered parameters. Coping type may be pure (1 subtype), combinative (2 subtypes) or diffuse (3 or more subtypes for one patient).

Values of observed pure, combinative, and diffuse disease coping in research patients are presented in figure 1.



**Fig. 1.** Values of pure, combinative, and diffuse coping in research patients' groups, % from research group.

Pure coping type was observed in part of each research group. It seems that the disease influenced the patient's acceptance of the situation in similar manner both for ADe and CIE patients as they presented pure or

combined coping results in similar manner. Even though ADe patients had their childhood affected by AD related problems when CIE ones faced the disease in adultly both

groups of research patients were closer to pure coping type than the others.

Adaptive disease coping type which is the most desirable for effective cooperation between a patient and medical staff includes 3 possible subtypes: harmonic,

ergopathic and anosognostic ones. Adaptive coping subtypes were registered for all research patients as an example of pure adaptive type or in combinations with maladaptive ones. Values of different adaptive coping subtypes are presented in fig.2.

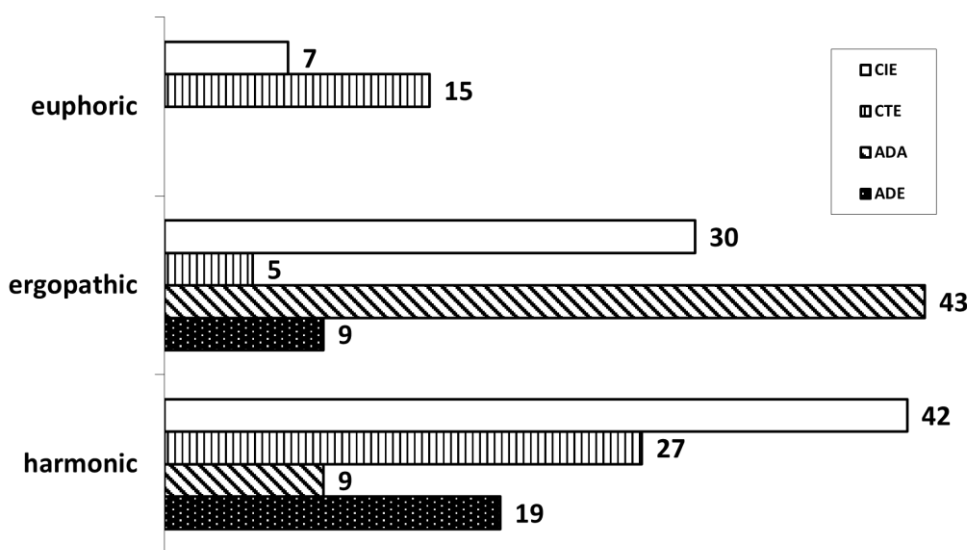


Fig. 2. Values of different adaptive coping subtypes in research patients' groups, % from research group.

Harmonic (realistic) disease coping is associated with the most adequate acceptance of the disease by a patient, effective and accurate following medical recommendations, and as a result the best prognosis for the treatment results. This coping subtype was observed in all research patients' groups with the highest frequency for CIE patients (42% from 74 patients) that is significantly higher than ADE and ADA patients ( $p < 0,05$  and  $p < 0,01$  accordingly). ADA patients copied the disease in realistic way the less frequently among others (9% from 56).

Ergopathic coping is associated with some lack of understanding of the disease severity and its impact on life quality and duration. Psychologically it may be described as "escape from disease to job or hobby" and leads to selective following medical recommendations which are less important than job related issues from patient's point of view. Finally, results of the treatment may not be as effective as achieved by medical staff. All research groups have patients presenting this coping subtype. The most frequently and significantly higher than in ADE and CTE it was observed in ADA patients (43% from 56 patients).

Quite frequently such coping was registered in CIE patients (30% from 74).

Anosognostic (euphoric) disease coping is characterized by neglecting the disease which is considered to be a temporary case of changed self-feeling. Typically, a patient refuses from precise examinations and significant treatment activity. In practice, numerous explanations are necessary both from relatives and medical staff to start effective treatment. Euphoric coping of the disease was observed exclusively in eczema groups patients and newer reported for AD patients.

On the contrary to adaptive type two types of maladaptive coping are usually associated with impaired cooperation between a patient and medical staff due to changes in emotional-effective sphere. Depression, anxiety, "escape to disease", refusal to fight with a disease are frequent issues. Maladaptive coping impacts communication between a patient and people who want to help and, thus, decreases effectiveness both for diagnostic and treatment activity. Values of maladaptive intrapsychic disease coping subtypes are presented in fig.3.

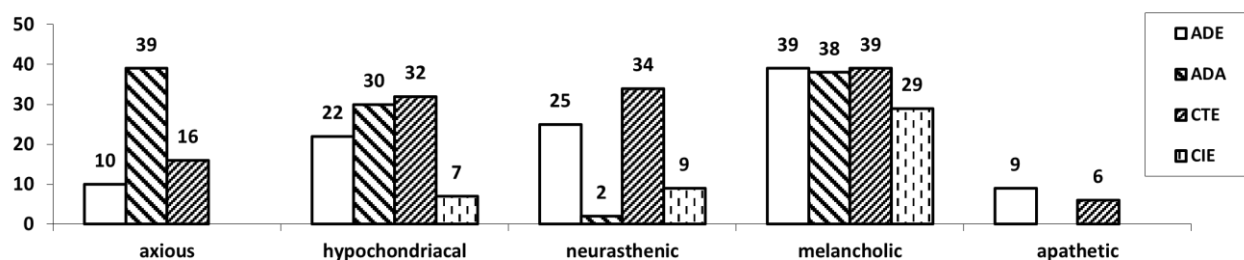


Fig. 3. Values of different maladaptive intrapsychic coping subtypes in research patients' groups, % from research group.

Anxious coping is associated with constant anxiety and expectation of bad treatment results, searching of new methods for diagnostics and treatment, changing hospitals and medical specialists. It results in poor cooperation in medical staff. Anxious coping was not registered in CIE patient but was significantly more common ( $p < 0,01$ ) for ADA patients than for other research groups.

Hypochondriacal disease coping is characterized by excessive attention to unpleasant feelings, searching for new symptoms, and, as a result, medical staff faced to receive new negative information from a patient on regular base. This may lead to lost objectivity by a physician, "mechanical" following recommendations by a patient. Hypochondriacal coping was observed in all research groups with the lowest rate in CIE patients ( $p < 0,05$ ).

Neurasthenic disease coping is manifested with flashes of irritability at unpleasant feelings, impatience at examination and treatment. This may produce a psychological distance between a patient and medical staff or his relatives. The most often this coping type alone or in combination with other types presented CTE patients (34% from 62 patients). On the contrary, it was seldom in ADA group.

Patients with melancholic coping do not believe in positive treatment results and generally have pessimistic view on their place in society and family. Resulting from this they generally do not demonstrate satisfaction from medical staff activity even despite objective evidence of significant improvement. This subtype of coping was present in all research groups mostly as a part of combined or diffuse coping. We assume that chronic course of the diseases was responsible for this finding.

Apathetic coping is manifested with complete indifference to personal destiny, examination, and treatment results. Patients are passive at examination and continue to take medications or procedures as long as they are controlled by somebody. This subtype was observed in several patients from ADE and CTE groups only.

**Discussion.** Disease coping by a patient may significantly impair patient's compliance, objectiveness of a medical staff and effectiveness of examination and treatment. Chronic course of skin disease, age of the disease onset may influence the way of this coping. As was observed at our research, pure type of disease coping is not a commonest situation at chronic allergic skin diseases and was registered from 23 to 39% in research groups being the most frequent at CIE. We may assume that CIE is usually associated with one major causative problem which tends to influence a patient's mentality not so diverse.

Adaptive disease coping by a patient is a good situation for medical staff and hopefully registered often in researched groups. Realistic coping as a best prognosis for patient's compliance we may dominantly observe in CIE and CTE patients with the lowest rate in ADA patients. The last ones may be not very compliant as often present ergopathic coping with less attention to disease in comparison to other problems.

Maladaptive coping was often observed not as a pure type but in combination with at least one adaptive subtype. This made routine behavior of the patients not evidently severe as the subtype description. Nevertheless, maladaptive disease coping may significantly impact medical management efficacy in the way, common for this situation. As the other maladaptive coping subtypes were

registered with different frequency among research groups, melancholic way of coping was present in all of them with almost the same figures. We should take in account that patients may be "tired" from chronic disease and such probability increases with its duration.

#### Conclusions:

1. Disease coping by a patient should be taken in account while examination and treatment of a patient to provide better patient's compliance and results.

2. Chronic allergic skin diseases are characterized by pure, combined or diffuse types of disease coping by patients.

3. Adaptive coping a disease is observed not for all patients with chronic allergic skin diseases and varies in its subtype's frequency depending on diagnosis.

4. Maladaptive coping a disease is common for chronic allergic skin diseases patients in combination with adaptive coping or alone and may significantly decrease efficacy of medical management of the disease if not taken in account.

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**АСПЕКТИ СТАВЛЕННЯ ДО ХВОРОБИ  
ПАЦІЄНТАМИ З ХРОНІЧНИМИ  
АЛЕРГІЧНИМИ ХВОРОБАМИ ШКІРИ**

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**Резюме. Мета.** Проаналізувати ставлення до хвороби дорослими пацієнтами із хронічними алергічними хворобами шкіри на початку загострення.

**Матеріали та методи.** Обстежено 123 хворих на atopічний дерматит (АД), 62 на хронічну справжню екзему (ХСЕ) та 74 на хронічну інфекційну екзему (ХІЕ). Тяжкість перебігу оцінювали за шкалою SCORAD та шкалою інтенсивності свербіжжю. Характер ставлення до хвороби визначали за тестовою методикою «ТОБОЛ». Результати опрацьовували методами параметричної та непараметричної статистики.

**Результати.** Спостерігали різні особливості ставлення до хвороби. Чистий тип, що складався лише з одного підтипу, визначали в частини пацієнтів усіх

груп. Частота виявлення чистого або комбінованого типів була подібна в групах ХСЕ та АД із початком дерматозу в дитинстві.

Адаптивні типи ставлення спостерігались в усіх пацієнтів в якості чистого типу або в комбінації із дизадаптивними підтипами. Гармонійний та ергопатичний підтипи визначались в усіх групах із найвищою частотою, відповідно в групах ХСЕ та АД з початком в дорослому віці. Анозогностичний визначали лише у хворих із хронічними екземами.

Дизадаптивні типи сприйняття хвороби ускладнюють співпрацю пацієнта із медичним персоналом. Тривожний підтип був частіше властивим хворим на АД із пізнім початком, неврастенічний – на ХСЕ, меланхолічний – всіх груп; гіпохондричний – найменш часто визначався в хворих на ХІЕ, апатичний – не зустрічався у хворих на ХІЕ та дорослий тип АД.

**Висновки.** Особливості сприйняття пацієнтом власної хвороби можуть суттєво вплинути на взаємодію із медперсоналом. Чистий тип сприйняття спостерігається не більше як в 40 % хворих на хронічні алергодерматози. Визначення особливості ставлення до своєї хвороби полегшує прогнозування ефективності ведення дерматологічного хворого.

**Ключові слова:** atopічний дерматит, хронічна екзема, ставлення до хвороби.

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