

RELATIONSHIP AMONG ALEXITHYMIA, ANXIETY, AND DEPRESSION IN PATIENTS WITH CHRONIC IDIOPATHIC URTICARIA

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ABSTRACT

Objective: The aim of this study was to determine the relationship among anxiety, depression, and alexithymia in patients with chronic idiopathic urticaria (CIU).

Material and Method: A cross-sectional study was performed on 75 CIU patients between January and March 2006. 51 healthy adults formed the control group. A semi-structured interview form, the Beck Anxiety Inventory (BAI), the Beck Depression Inventory (BDI), and the Toronto Alexithymia Scale (TAS-26) were administered.

Results: Mean age (SD) was 35.6±9.30 years, 85.3% were female of the patients. Mean age (SD) was 32.6±11.24

years, 82.4% were female of the control group. The BAI, BDI, TAS mean scores of CIU patients were significantly higher than those of the control subjects ($p \leq 0.01$). The alexithymia score was positively correlated with depression ($r=0.38$, $p=0.001$), and anxiety ($r=0.29$, $p=0.01$) symptoms.

Conclusion: Our results showed that alexithymia has a close relationship with depression and anxiety in the patients with CIU. We suggest that alexithymia must be considered as a possible risk factor beside anxiety and depression in the management of CIU.

Key Words: Urticaria, alexithymia, anxiety, depression
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KRONİK İDİOPATİK ÜRTİKERLİ HASTALARDA ALEKSİTİMİ, ANKSİYETE, DEPRESYON İLİŞKİSİ

ÖZET

Amaç: Kronik idiyopatik ürtiker (KİÜ) hastalarında aleksitimi, anksiyete ve depresyon arasındaki ilişkiyi incelemektir.

Materyal ve Metod: Bu kesitsel çalışma, Ocak-Mart 2006 arasında başvuran 75 KİÜ hastasında yapılmıştır. 51 sağlıklı yetişkin kontrol grubunu oluşturmuştur. Yarı yapılandırılmış görüşme formu, Beck Anksiyete Ölçeği (BAÖ), Beck Depresyon Ölçeği (BDÖ) ve Toronto Aleksitimi Ölçeği-26 (TAÖ-26) kullanılmıştır.

Bulgular: Hastaların yaş ortalaması 35,6±9,30 yıl ve

%85,3'ü kadın; Kontrol grubundakilerin yaş ortalaması 32,6±11,24 yıl ve %82,4'ü kadındır. KİÜ hastalarının BAÖ, BDÖ, TAÖ puan ortalamaları, kontrol grubunun ortalamalarından istatistiksel olarak anlamlı ölçüde yüksektir ($p \leq 0,01$).

Aleksitimi puanı, depresyon ($r=0,38$, $p=0,001$) ve anksiyete ($r=0,29$, $p=0,01$) semptomları ile pozitif olarak ilişkili bulunmuştur.

Sonuç: Çalışmamızın sonuçları, KİÜ hastalarında aleksitiminin depresyon ve anksiyete ile ilişkili olduğunu göstermiştir. KİÜ yönetiminde anksiyete ve depresyonun yanında aleksitiminin olası risk faktörü olarak düşünülmesi gerektiğini önermekteyiz.

Anahtar Kelimeler: Ürtiker, aleksitimi, anksiyete, depresyon
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INTRODUCTION

Urticaria is described as short-lived, erythematous cutaneous swellings resulting from transient dermal edema and vasodilatation. The weals are usually itchy and last less than 24 hours. Chronic urticaria (CU) is defined as a 6-week or longer history of widespread wealing.¹⁻³ The etiological reason cannot be found in many cases (50%-75%) and the disease is defined as chronic idiopathic urticaria (CIU).⁴

Psychological factors have been widely considered to be important in patients with CU.⁵⁻¹⁰ Various studies reported an association between stress, anxiety, or depression symptoms and CU.¹¹⁻¹³ Lindemayr et al. proposed that introversion, nervousness, aggressiveness and psychosomatic disorders were higher in CU patients.¹⁰ Lyketsos et al. found that patients with urticaria had presented a lower level of dominance, but significantly higher degree of extrapunitiveness, intrapunitiveness, anxiety and depression.¹¹ Anxiety, depression and psychosomatic symptoms are some of the psychopathologic features of urticaria.¹⁴ In a multicenter study, 100 patients with CU were examined. Almost one third of the patients showed elevated scores for depression and for symptoms that are often associated with depression.¹⁵

Alexithymia is a personality trait characterized by reduced symbolic thinking, a poor fantasy life, and a limited ability to identify and verbally express emotions.¹⁶ Alexithymia can be considered as one of several possible risk factors for a variety of medical and psychiatric disorders.¹⁷ The possible role played by alexithymia in the development process of physical illness has become a major concept within psychosomatic medicine.¹⁸

In 1970, Nemiah and Sifneos reported that patients with classical psychosomatic disorders, such as ulcerative colitis, asthma, peptic ulcer, or rheumatoid arthritis, showed a "marked difficulty in verbally expressing or describing their feelings and an absence or striking diminution of fantasy."¹⁹ There exist several studies indicating that alexithymia is frequent among dermatological disorders, especially in psoriasis but research on the presence of alexithymia in CU is limited to two studies.^{6,18,20-26}

In recent years, the connection between alexithymia and depression or anxiety has been investigated in general population, some healthy specific groups and clinical samples.²⁷⁻³⁶ But no studies have yet focused on this association within the CIU patients.

The aim of this study was to determine the relationship

among anxiety, depression, and alexithymia in the patients with chronic idiopathic urticaria.

MATERIAL and METHOD

Participants

Patients with CIU who met selection criteria among the first attending 150 patients who had applied to the Allergy Department of Istanbul Medical Faculty between January and March 2006 were included in the study (n=75).

The inclusion criteria were as follows: 1) a diagnosis of CIU, 2) age between 18 and 65 years, 3) lack of any apparent psychotic symptom or mental retardation, 4) provision of informed consent, 5) ability to sufficiently read, write and comprehend the Turkish language 6) lack of any co-morbid medical disease, and 7) taking no psychotropic or corticosteroid medications during assessment period.

A group of 51 healthy individuals matched socio-demographically with the study group from the general population was used as the control group.

Ethical consideration

The study was approved by the Ethics Committee of the Istanbul Faculty of Medicine. Patients were given information according to the Helsinki declaration, and informed consent was obtained.

Procedures

A semi-structured interview form including relevant information concerning socio-demographics, data on medical state, questions about presence of psychosocial stressors, and the effects of stress on the current illness; the Toronto Alexithymia Scale (TAS), the Beck Anxiety Inventory (BAI), and the Beck Depression Inventory (BDI) were administered to CIU patients and the control group.

Medical Evaluation

Diagnosis of CIU: The diagnosis of CIU was based on the elimination of all the probable causes of chronic urticaria (CU) in the patients who reported recurrent pruritus, wheal, and flares for more than 6 weeks. Exposure to allergenic drugs, foods, insect stings, and chemicals was explored by a detailed history.

All the patients had negative skin prick test results with a standard food allergen panel and showed no improvement in their condition after an elimination diet. After a physical examination, peripheral blood cell count, erythrocyte sedimentation rate determination, urine and stool analysis, blood chemical panel→

Table 1: Patient and Control Group Demographic Characteristics					
Demographic characteristics		Patient group (n=75) n (%)	Control group (n=51) n (%)	p	
Sex	Female	64 (85.3)	42 (82.4)	0.416	
	Male	11 (14.7)	9 (17.6)		
Education	Primary	28 (37.3)	13 (25.5)	0.146	
	High school	28 (37.3)	28 (54.9)		
	University	19 (25.3)	10 (19.6)		
Marital Status	Married	49 (65.3)	31 (60.8)	0.369	
	Single	26 (34.7)	20 (39.2)		
Age (Mean, SD)		35.65 ± 9.30	32.63 ± 11.24	0.102	

Table 2: Patient and Control Group BAI, BDI, TAS Scores				
	Patient group (n=75)	Control group (n=51)	t	p
TAS (alexithymia score)	11.95 ± 2.84	9.68 ± 4.41	3.417	0.001
BAI (anxiety score)	20.92 ± 12.23	14.22 ± 13.11	2.895	0.004
BDI (depression score)	15.91 ± 9.12	11.20 ± 11.07	2.556	0.01

(including hepatic enzymes measurement), thyroid hormones measurement, antinuclear antibodies detection, and autologous serum skin tests were performed for the identification of any infectious or chronic autoimmune diseases. Patients who did not meet the diagnostic criteria for a causal illness or type I sensitivity were considered to have CIU.³⁷

Identification of disease severity: Disease severity was also evaluated by an experienced physician in 3 visits at weekly intervals. The physician scored the disease severity as mild (1), moderate (2), or severe (3), based on the frequency, spread, and the number of hives.

Psychological Evaluation

The Toronto Alexithymia Scale (TAS): The 26-item TAS published in the mid-1980s is a psychometrically well-validated and reliable instrument for the assessment of alexithymia.³⁸ Higher scores represent a higher intensity level of alexithymia. The Turkish translation, reliability and validity study of TAS-26 was conducted.³⁹

The Beck Anxiety Inventory (BAI): The BAI is a 21-item measure designed to assess the severity of self-reported anxiety.⁴⁰ Responses to each item range from 0 (not at all bothered) to 3 (severely bothered), with a possible range of total scores from 0 to 63. Higher scores represent a higher intensity level of anxiousness. Validity and reliability studies have been performed for the Turkish form by Ulusoy et al.⁴¹

The Beck Depression Inventory (BDI): This inventory includes 21 items designed to screen signs of depression

that occur in the vegetative, cognitive, motivational, and emotional fields.⁴² Responses to each item range from 0 (not at all bothered) to 3 (severely bothered), with a possible range of total scores from 0 to 63. The higher point of total BDI scores, the higher the level of depression. Validity and reliability studies have been performed for the Turkish form.⁴³

Analysis

The data generated by this study were analyzed with SPSS statistical software, version 12.0 for Windows (SPSS Inc, Chicago, IL). The data of patient and control group demonstrated normal distribution. X² tests were used to evaluate the differences between groups for categorical variables (Table 1). Student-t test was used for comparisons between groups for continuous variables (Table 2). The correlation between TAS, BDI, and BAI means scores were tested by Pearson Correlation analysis in patient group (Table 3).

RESULTS

Mean age was 35.6±9.30 years, 85.3% were female of the patients with CIU. Mean age was 32.6±11.24 years, 82.4% were female of the control group. The socio-demographic characteristics of the patient and control groups are shown in Table 1.

The mean duration of the disease was 6.62±7.45 (range 3-36) years. Symptoms were intermittent in 49.3% and persistent in 50.7% of the patients. According to symptom score assessments, disease severity was severe in 24%, moderate in 61.3% and mild in 14.7% of study participants. A total of 54.7% of the patients were taking antihistamines, 33.3% were taking antihistamines plus corticosteroids, and the remaining received no treatment during the study period.

Psychosocial stressors (e.g., family, work, economic) were reported by 92% of the patients. 65.3% answered as “yes” when they were asked “Do you think that stress played a role in the development of your illness?”

The alexithymia (TAS) mean score was 11.95±2.84 (range 3-19) of patients with CIU. The anxiety (BAI) mean score was 20.92±12.23 (range 1-51) of patients with CIU, and depression (BDI) mean score was 15.91±9.12 (range 2-38). Significant differences were found between the CIU patients and the control group in terms of alexithymia score (p=0.001), anxiety score (p=0.004), and depression score (p=0.01) (Table 2).

The alexithymia score was positively correlated with depression (r=0.38, p=0.001), and anxiety (r=0.29, p=0.01) symptoms (Table 3). →

DISCUSSION

In this study, we found that CIU patients had higher levels of anxiety, depression and alexithymia scores. The difference between the patients and control groups was statistically significant. These findings support the opinion that emotional dysregulation is a triggering factor for CIU.

Çalikuşu et al. evaluated both anger and alexithymia in 31 cases of psychogenic excoriation (PE) and 31 patients of CU and found that PE patients had more anger and alexithymia levels than CU patients. There was a positive correlation between anger and alexithymia scores.²⁵ Maniaci et al. investigated alexithymia in 40 patients with chronic urticaria. All of the subjects completed Toronto Alexithymia Scale (TAS-20); Rorschach Inkblot Test and Family Drawing Test. Twenty subjects (50%) obtained alexithymia scores greater than 60 in TAS-20. CIU patients had higher alexithymia levels ($p < 0.05$) on comparison to the normal population. There was also a positive correlation between CIU patients and the presence of depressive characteristics.²⁶

High prevalence rates of alexithymia have been identified in patients with a variety of health problems, including skin diseases.^{18,44-49} It has been proposed that alexithymia might play a role as a risk factor for some dermatological conditions. Alexithymia, insecure attachment, and poor social support were found to be associated with the onset of alopecia areata and with exacerbations of vitiligo and plaque psoriasis.^{16,50,51} Allegranti et al. found a significant difference between the patients with psoriasis and healthy controls.²⁰ One study found a trend for psoriasis patients with recent exacerbations to have higher scores on the 20-item TAS than those with other skin conditions.²² Richards et al. recently demonstrated the presence of alexithymic characteristics in 33% psoriatic patients; however, the total TAS score was not correlated with disease parameters.¹⁸

On the other hand, some other studies failed to demonstrate a significant association between alexithymia and dermatological disorders.^{6,22} Rubino et al. using the TAS, found that while patients with psoriasis scored higher on this measure relative to controls, the difference was not statistically significant.²³

In fact, the association of CU with various psychological morbidities is well known for a long time. Similar to other chronic medical illnesses, patients with CU were shown to be more depressed and anxious compared to healthy controls.^{14,52-55} Engin et al, found in their study where the same psychological assessment tools were used, patients with CIU had significantly higher depression and anxiety

Table 3: The correlation between alexithymia, anxiety and depression scores of the patients with CIU

	TAS (alexithymia score)	BAI (anxiety score)	BDI (depression score)
TAS (alexithymia score)	1.00	0.29 0.01	0.38 0.001
BAI (anxiety score)		1.00	0.24 0.03
BDI (depression score)			1.00

scores when compared with healthy controls.⁵⁶ Another study showed that 74 patients with chronic urticaria had higher psychopathologic ratings than healthy controls.⁵ According to two different studies which applied the Symptom-Screening List-90 (SCL-90), somatization, obsessive compulsive disorder and anxiety level were significantly increased in urticaria than in the control group.^{8,57}

As contrary, some studies failed to show that CU has an effect on psychological status of the patients. In a well-controlled study involving various dermatological diseases, it was found that BDI and Spielberger's State-Trait Anxiety Inventory scores of patients with alopecia areata psoriasis vulgaris and chronic urticaria were not different than the control group, except for those patients with pruri universalis.⁵⁸ Topal et al. reported that anxiety and depression scores were not different between CU patients and healthy controls by using the same psychological assessment tools.⁵⁹ Sheehan-Dare et al. found a lower incidence of depression and anxiety in patients with CU than those with generalized pruritus. In the same study, depression was more common in CU patients than in the controls, but the difference was not statistically significant.¹³

One important finding of this current study was positive correlation among the mean scores of BAI, BDI and TAS ($p < 0.005$). There exist limited studies considering depression and anxiety together to compare them with alexithymia.^{27,29,32} Marchesi et al. found that the TAS-20 total score was higher in patients with depressive or anxiety disorders than in controls.³² Hendryx et al. demonstrated that TAS dimensions were positively related to depression and anxiety.²⁹

A number of studies have attempted to find an association between depressive mood and alexithymia.^{30,31,35,60-62} Saarijarvi et al. found in 230 consecutive outpatients, referred to a psychiatric consultation, that alexithymic characteristics (TAS-26) were significantly associated with the presence of a psychiatric disorder, especially depression.³³ Hintikka et al. showed that alexithymia and depression positively correlated, even overlapped.⁶³ Although less studied, a relationship between anxiety and alexithymia was reported.⁶⁴ →

Study Limitations

A cross-sectional survey design limits the generalizability of the study findings. Apart from the healthy controls, the control group can be compared to subjects who have different types of chronic diseases.

CONCLUSION

CIU seems to be associated with alexithymia as well

as other important comorbid psychological problems such as anxiety, and depression. The findings of this study support the previous data suggesting that screening for alexithymia may also be useful in order to reveal the role of emotional dysregulation as a triggering factor in CIU.

In handling patients with CIU, we should be well aware that it is a complex psychosomatic situation.

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