

Alexithymia, anxiety, and depression in patients with vitiligo

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Abstract

Aim: Characterized by hypopigmented cutaneous lesions, vitiligo is a chronic dermatological disease with psychosocial effects. The goal of our study is to search alexithymia, anxiety, and depression levels in vitiligo patients.

Materials and Methods: In total, 50 vitiligo patients aged over 18 years and 70 healthy control subjects compatible with age and gender were evaluated. All participants filled in the questionnaires of the Toronto Alexithymia Scale (TAS-20), Beck Anxiety inventory (BAI), and Beck Depression inventory (BDI).

Results: In vitiligo patients, depression and anxiety levels were meaningful higher than the controls ($p = 0.009$, $p = 0.000$, respectively), but there was no meaningful difference between alexithymia scores ($p = 0.103$). There was no correlation between psychiatric scale scores and disease duration, age, gender, and education levels in vitiligo patients. A positive correlation was determined between alexithymia levels and anxiety and depression levels in vitiligo.

Conclusion: In this study, anxiety and depression levels were found to be high in patients with vitiligo. According to the results of our study, vitiligo should not only be evaluated dermatologically but also psychologically. In this way, we think that patients' compliance with treatment and treatment success will increase.

Keywords: Alexithymia; anxiety; depression; vitiligo

INTRODUCTION

Vitiligo is a pigmentation disease that develops due to melanocyte destruction, affecting 0.5-1% of the total population. Clinically characterized by sharply limited, asymptomatic, hypopigmented cutaneous lesions (1,2). It affects both genders equally, and about half of cases start before the age of 20 (3). Skin, the body's largest organ, greatly affects the physical appearance. Dermatological diseases are generally accompanied by psychiatric findings. Especially, lesions in the visible parts of the body cause psychosocial stress, which leads to decreased quality of life and psychological disorders (4,5). It is known that stress causes many skin diseases to occur or plays a role in increasing the severity of existing skin diseases (6). Vitiligo lesions can cause psychological disorders as they pose a cosmetic problem. Vitiligo is more associated with psychosocial shame than other dermatological diseases. In studies, psychiatric morbidity is reported in approximately one-third of patients (7). It is reported in the literature that the most common adjustment disorders, depressive disorders, and anxiety disorders accompany vitiligo (5).

Alexithymia is defined as a difficulty in differentiating, describing, distinguishing and expressing the feelings of one's own and others (8). It has been reported that alexithymia is also observed in various physical and psychiatric diseases including dermatological diseases and in the general population (5,9,10). Alexithymic people have a lower ability to deal with difficult life events. Many researchers think alexithymia is one of the triggering factors for diseases (5,11).

Assessment of vitiligo patients for concomitant psychiatric disorders can contribute to improving the quality of life and treatment success. Although there are many studies evaluating anxiety and depression in vitiligo patients, there are conflicting results. There are a limited number of studies on its relation with alexithymia. The aim of our study is to contribute to the literature by evaluating the depression, anxiety, and alexithymic characteristics of vitiligo patients.

MATERIALS and METHODS

This cross-sectional study was carried between September 2019 and November 2019 at Kutahya Health

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Sciences University Faculty of Medicine, Department of Dermatology. The study group included 50 vitiligo patients, and the controls consisted of age and gender-matched 70 healthy individuals. Literate people aged 18-70 years were included in the study. Those who received psychiatric diagnosis and treatment were kept out of the study. Approval was obtained from the local ethics committee for this study.

The patients with vitiligo were grouped as generalized and localized according to their clinical involvement. Demographic information, disease characteristics and family history of the study group were recorded. The study and control groups filled the psychiatric scales.

Toronto Alexithymia Scale (TAS-20)

It is a self-rating questionnaire consisting of 20 questions commonly used to evaluate alexithymia. The height of the total score indicates an increased alexithymic level (12). In addition to the overall alexithymia score of this scale, there are three sub-scales: difficulty in identifying emotions, difficulty in describing emotions and extrovert thinking. In this study, only a general alexithymia score was used (9,10). According to the Turkish version of the scale, people scoring 59 and above were considered alexithymic (13).

Beck Anxiety Inventory (BAI)

It is a self-assessment questionnaire be composed of 21 items applied to evaluate the grade of anxiety. The height of the total score indicates an increased level of anxiety (14). The reliability and validity study was conducted in Turkey (15).

Beck Depression Inventory (BDI)

It is a self-assessment survey be composed of a total of 21 questions used to evaluate depression symptoms and severity. The total score showed the level and severity of depression (16). A validity and reliability study of the Turkish version of the questionnaire was conducted (17).

Statistical Analysis

In this study, data analysis was done using SPSS 18.0 version. Kolmogorov-Smirnov test was used to appreciate the conformity of the data to normal distribution. Student's t-test, chi-square test, and Mann-Whitney U test were utilized to examine differentiation between independent samples. Spearman correlation was applied to examine the relationship between variables. A value of p-value <0.05 was evaluated statistically significant.

RESULTS

This study consisted of 120 people, of which 58.3% were the control group and 41.7% were vitiligo patients. Of these, 64 (53.3%) were female and 56 (46.7%) were male. The average age of the people in the study was 38.05 ± 14.12 . Seventy-three (60.8%) were married. According to the clinical involvement of vitiligo patients, 41 (82%) were generalized type, while 9 (18%) were localized type. There was no meaningful difference between vitiligo patients and controls between sex, age, and marital status parameters ($p > 0.05$). The controls were found to be at a higher education level than the study group ($p = 0.001$) (Table 1).

Table 1. Study and control group demographic characteristics

	Study group (n=50) n(%)	Control group (n=70) n(%)	Total (n =120)	Statistics
Age (mean±sd)	40.34±14.62	36.41± 13.63	38.05± 14.12	Z =-1.350 p = 0.177
Gender				
Male	22 (44.0)	34 (48.6)	56 (46.7)	X ² = 0.245 p = 0.621
Female	28 (56.0)	36 (51.4)	64 (53.3)	
Marital status				
Single	16 (32.0)	31 (44.3)	47 (39.2)	X ² = 1.848 p = 0.174
Married	34 (68.0)	39 (55.7)	73 (60.8)	
Educational level				
Primary school	24 (48.0)	12 (17.1)	36 (30.0)	X ² = 14.13 p = 0.001
Secondary school	12 (24.0)	20 (28.6)	32 (26.7)	
University	14 (28.0)	38 (54.3)	52 (43.3)	

Depression and anxiety levels in patients with vitiligo were significantly higher than controls ($p = 0.000$, $p = 0.009$, respectively), but there was no significant differentiation between alexithymia scores ($p = 0.103$). Participants with TAS-20 scores of 59 and above were accepted as alexithymic. Alexithymia was detected in 14 % of vitiligo patients and 12.9 % of the controls. There was no significant differentiation between the two groups in terms of alexithymia status ($p = 0.856$) (Table 2).

There was no meaningful correlation between the duration of illness, age, gender, education levels, and TAS, BAI, and BDI scores of patients with vitiligo ($P > 0.05$) (Table 3). In addition, no relationship was found between the clinical involvement of the disease and TAS, BAI, and BDI scores. A positive correlation was determined between alexithymia levels and depression and anxiety levels in vitiligo ($p = 0.005$, $p = 0.002$, respectively).

Table 2. Scores of study and control group questionnaires

	Study group	Control group	t /z	p
BDI mean±sd	13.46±8.12	7.74±6.3	Z =-3.969	0.000
BAI mean±sd	10.92±7.84	7.51±7.18	Z =-2.606	0.009
TAS mean±sd	49.04±9.46	46.11±9.71	t =1.644	0.103
	n(%)	n(%)	χ ²	p
Alexithymia				
No	43 (86.0)	61 (87.1)		
Yes	7 (14.0)	9 (12.9)	0.33	0.856

BDI: Beck Depression Inventory, BAI: Beck Anxiety Inventory, TAS: Toronto Alexithymia Scale

Table 3. Relationship between age, disease duration, educational level and TAS, BAI, BDI in patients with vitiligo correlation

	Age		Disease duration		Educational level	
	r	p	r	p	r	p
TAS	-0.110	0.449	-0.102	0.480	-0.132	0.360
BAI	-0.068	0.638	-0.035	0.808	0.017	0.905
BDI	-0.216	0.132	-0.035	0.810	0.056	0.698

TAS: Toronto Alexithymia Scale; BAI: Beck Anxiety Inventory; BDI: Beck Depression Inventory

DISCUSSION

The existence of a relationship between many skin diseases and psychological factors is known (11). In vitiligo, which causes cosmetic problems, disorders such as anxiety and depression may occur due to chronic stress. Concomitant psychological diseases can cause patient noncompliance to treatment, which may change the course of the disease (18). Therefore, a lot of research has been done on vitiligo, but the results are controversial.

In a study conducted in our country, depression and anxiety were reported to be the most common psychiatric disorders with vitiligo patients (19). The studies evaluating anxiety and depression were conducted using different questionnaires. In this study, anxiety and depression levels in vitiligo patients were significantly higher than the controls, as in other studies in the literature (4,5,20). In some studies, however, it was found that depression and anxiety levels in vitiligo patients were not different from the normal population (21,22). In the studies of Bilgiç et al., high depression scores were found in children with vitiligo compared to the controls, but it was reported that there was no significant differentiation between anxiety scores (23).

Alexithymia, which was initially thought to be related to psychosomatic diseases, is considered as a risk factor for many medical and psychiatric diseases today (5,11,24). Alexithymic people are less capable of coping with stress. Psychological stress is known to be an important factor in the onset or exacerbation of many dermatological diseases, including vitiligo (5,24). Few studies have been reported in the literature investigating the relationship between vitiligo and alexithymia. The prevalence of alexithymia was found to be approximately

10-13% in the general population (24). In our study, we found alexithymia prevalence as 12.9% in the controls, this outcome was consistent with the literature. Picardi et al. described that TAS-20 scores of 31 vitiligo patients were meaningfully higher than the controls and 35.5% of vitiligo patients were alexithymic. They reported that alexithymia is a risk factor that increases susceptibility to vitiligo (11). Similarly, Dehghani et al. reported that 30 vitiligo patients had higher TAS scores than controls and 36.7% were alexithymic (25). In a study from our country, TAS-26 scores of vitiligo patients were reported to be meaningfully higher compared to controls, and 38% were reported to be alexithymic (5). On the contrary, in this study, no significant differentiation was determined between the groups in total TAS scores. In addition, 14% of vitiligo patients were alexithymic, and there was no significant differentiation when compared with controls. In another study conducted in our country, similar to our study, there was no significant differentiation in vitiligo patients in terms of alexithymia compared to controls (26).

Similar to the studies in the literature, no correlation was determined between the duration of the disease and alexithymia, anxiety, and depression in our study (4,23,26).

Balaban et al. reported that psychiatric morbidity was found more frequently in young people and women with vitiligo (27). In our study, no relation was found between gender and age of vitiligo patients and anxiety and depression scores. In another study conducted in our country, no significant differentiation was determined between men and women with vitiligo in terms of depression, whereas a significant height was found in men in terms of anxiety (5). These different results may be due to regional cultural differences, religious beliefs, and related clothing styles.

Different consequences have been reported in studies examining the relation between alexithymia and sociodemographic variables in studies. (10,24,28,29). In our study, no relation was found between the total alexithymia scores of the patients with vitiligo and their gender, age, and education level.

It is known that alexithymia is related to depression and anxiety (9,24). In the literature, it is reported that depression grade was higher in alexithymic patients (10). Similarly, a positive correlation was found between alexithymia, depression, and anxiety in this study.

Our study had some limitations, the first being relatively small and cross-sectional design. Second, the data depend on the questionnaires filled out by the participants and no psychiatric interviews were conducted. In the future, we think that more comprehensive, prospective studies should be conducted on this subject. Finally, in our study, the relationship between localization and/or visibility of vitiligo lesions and psychiatric morbidity could not be investigated. Whether the visibility of skin lesions is critical for psychological morbidity in patients with vitiligo is controversial (4,18,21). Therefore, further studies including this subject are needed in future studies.

CONCLUSION

In our study, while the level of depression and anxiety in patients with vitiligo was higher than the controls, we did not find a significant differentiation in alexithymia. These results showed us that psychiatric morbidity, especially anxiety and depression, are more common in vitiligo patients. We think that the success of the treatment will be increased by evaluating patients with vitiligo in terms of depression and anxiety and providing psychiatric support when necessary.

Competing interests: The authors declare that they have no competing interest.

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