Alexithymia and Self-Esteem in Patients with Ankylosing Spondylitis

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ABSTRACT

Introduction: Ankylosing spondylitis (AS), which has an unknown etiology, inflammatory disorder, characterized by inflammation of the spinal joints and adjacent structures. It has a negativ effect on all aspects of a patients's life: Physically, psychologically and socially. The purpose of this study was to determine the effect of AS on self-esteem and alexithymia.

Method: In this study, 50 patients from the department of physical therapy and rehabilitation with the diagnosis of AS who were under traetment and follow-up and 50 healty volunteers who matched for age and gender were taken. Toronto Alexithymia Scale (TAS), Beck Depression Inventory (BDI), Rosenberg Self-Esteem Scale (RSES), Beck Anxiety Inventory (BAI), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) were performed to both patients and control group.

Results: Compared to the control group, the anxiety and depression scores were higher in the patient group and the alexithymic characteristics were significantly higher, self-esteem scores were significantly lower in the patient group ($p<.05$).

Conclusion: Like all the other inflammatory chronic diseases, depression and anxiety are commonly seen in AS patients. Alexithymia and self-esteem of these patients should be considered carefully. More studies are needed on this regard.

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Key words: Self esteem, alexithymia, ankylosing spondylitis

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Introduction

Ankylosing spondylitis (AS) is a chronic and progressive disease with an unknown etiology characterized by inflammation in the spinal joints and adjacent structures (1). It primarily leads to functional limitation by affecting the mobility of the vertebrae and joints. It is the prototype of seronegative spondyloarthropathies and occurs more commonly in men (2). It has been reported that inflammation and pain in the vertebrae and joints cause a decrease in physical activity, disruption in the quality of life, malaise, sleep disorders, depression, and anxiety (3,4). In the limited number of studies conducted, symptoms that occur frequently include depression and anxiety. In a study conducted by Eren et al. (5), psychiatric symptoms, including mainly depression and anxiety, were commonly observed in patients with AS and that the quality of life and disability are related to the levels of depression and anxiety. AS causes disruption in the

social, psychological, and physical aspects of life and may lead to problems in working and sexual life.

Alexithymia is defined as difficulty in recognizing, differentiating, and expressing the emotions of oneself and other people. It is expressed as "absence of words for emotions" (6). The concept of alexithymia was initially defined in psychosomatic diseases. In a study performed by Erden et al. (7), a significant relation was found between alexithymia and depression scores in young people who grew up apart from their families. In another study conducted by Batıgün et al. (8), it was reported that alexithymic properties should be considered when evaluating the psychological symptoms of patients who are referred for therapy. In a study conducted by Motan et al. (9), it was demonstrated that alexithymic dimensions showed different relations with depression and anxiety, with the point of view that that this concept was multi-dimensional, and studies were guided to investigate if it might be a differentiating variable between

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depression and anxiety. In a study conducted by Güleç et al. (10), alexithymia was investigated in patients with psoriasis, and it was reported that these patients were not alexithymic or anxious, but were more depressive.

Self-esteem is appreciation emerging as a result of self-acceptance by self-assessment. It arises from a person's need to evaluate oneself or to positively evaluate oneself. It means self-acceptance, forming an identity, and being accepted by others. Positive self-esteem is defined as acceptance of oneself as an individual and self-reliance (11,12,13).

In a study conducted by Demir et al. (14), which is one of the few studies conducted with patients with AS, no difference was found in female patients with AS compared with healthy volunteers in terms of sexual function, but the rates of depression, decrease in functionality, pain reporting, and decreased quality of life were reported to be higher in individuals with problems in terms of sexual dysfunction. In a study conducted with the spouses of patients with AS, the rates of decreased quality of life and increased depression were found to be higher in these individuals than in the control group (15). In a study conducted by Özkorumak et al. (16), increased depression and anxiety as well as sexual dysfunction were reported in male patients diagnosed with AS according to the DSM-IV diagnostic criteria compared with the control group. In literature, we did not find any study related to alexithymia and self-esteem in patients with AS. The primary objective of this study was to evaluate patients with AS in terms of alexithymia and self-esteem, and the secondary objective was to investigate the presence of depression and anxiety in patients with AS.

Methods

Fifty patients who were diagnosed with AS according to the modified New York criteria defined by the American Rheumatology Association in the Physical Therapy and Rehabilitation outpatient clinic and 50 age-matched healthy volunteers were included in the study. Necessary approval was obtained from the hospital ethics committee before initiating the study. Patients who were illiterate, who had another systemic illness, and who did not wish to fill in the questionnaire form were not included in the study.

Volunteers who did not have any metabolic, systemic, and psychiatric diagnoses and any clinical complaint were selected as the control group. The patients were asked to fill in the Beck Depression Scale (BDS), Beck Anxiety Scale (BAS), Short Symptom Inventory (SSI), Rosenberg Self-Esteem Scale (RSS), and Toronto Alexithymia Scale (TAS). The patients were evaluated according to the DSM-IV diagnostic criteria.

Fifty patients with AS and 50 healthy volunteers were included in the study. The patient and control groups were similar in terms of gender, age, and education level. A total of 100 patients were included in the patient and control groups, with 10 women and 40 men in each group. In the study group, 20% of the 50

patients were females ($n=10$) and 80% were males ($n=40$), and the mean age was 40.68 ± 12.25 years. The mean age of the volunteers in the control group was 40.72 ± 11.30 years.

In total, 26% of the patients included in the study were single, 72% were married, and 2% were widowed, whereas 30% of the volunteers in the control group was single, 64% were married, and 6% were widowed or divorced. The mean disease time of the patients included in the study was 11.24 ± 9 years.

When education status was examined, 4% of the patients with AS were literate, 72% were primary school graduates, 6% were high-school graduates, and 18% were university graduates. Among the volunteers in the control group, 2% were literate, 70% were primary school graduates, 8% were high-school graduates, and 20% were university graduates.

When the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) scores were examined, the mean score was found to be $4.23 \pm .55$.

Measurements

Sociodemographic and Clinical Information Data Form

This form includes general information about the patient and control groups. Age, gender, marital status, habits, drugs used, economical status, history of physical and psychiatric disease, and disease time are included in this form.

BASDAI

The patients were asked to perform scoring on a 10-cm visual analog scale. This index was developed by Gerett et al., and the validity and reliability studies of its Turkish version were performed by Karatepe et al. (17,18).

BDS

This is a self-assessment scale that measures physical, emotional, and cognitive symptoms observed in depression including the 21-symptom category. A high score indicates that depression is severe. This scale was developed by Beck et al., and the validity and reliability studies of its Turkish version were performed by Hisli (19,20).

BAS

This is a Likert-type evaluation scale scored between 0 and 3 and is composed of 21 items. It measures the frequency of the symptoms of anxiety experienced by an individual, and a high total score indicates a high level of anxiety. It was developed by Beck et al., and the validity and reliability studies of its Turkish version were performed by Ulusoy et al. (21,22).

TAS

The validity and reliability studies of the Turkish version of this scale, which was developed by Taylor et al. to measure the level of alexithymia, were performed by Dereboy (23,24). This is a self-assessment scale that is answered as "right" and "wrong." A high score indicates severe alexithymia.

Table 1. Scale scores in the subjects with and without ankylosing spondylitis

	AS	n	Mean
RSES	Yes	50	1.18±.44
	No	50	.45±.40
BDS	Yes	50	14.28±8.33
	No	50	8.80±7.91
BAS	Yes	50	18.22±8.09
	No	50	9.28±9.57
TAS	Yes	50	11.48±3.73
	No	50	8.86±3.63

AS: ankylosing spondylitis; RSES: Rosenberg Self-Esteem Scale; TAS: Toronto Alexithymia Scale; BAS: Beck Anxiety Scale; BDS: Beck Depression Scale

Table 2. Comparison of the patient group with ankylosing spondylitis and the control group according to scale score by independent t-test

	t	p
RSES	8.485	.000
BDS	3.357	.001
BAS	4.738	.000
TAS	3.553	.001

RSES: Rosenberg Self-Esteem Scale; BDS: Beck Depression Scale; BAS: Beck Anxiety Scale; TAS: Toronto Alexithymia Scale

RSES

This is a four-point Likert-type scale composed of 10 items measuring self-esteem among the 12 subscales of the scale. It was developed by Rosenberg (1965) and is composed of 13 items (25). Its validity and reliability studies were performed by Çuhadaroglu (1986) (26).

Statistical Analysis

Statistical analysis was performed using Statistical Package for the Social Sciences (SPSS Inc., Chicago, IL, USA) package program. Compatibility with the normal distribution of the data obtained by measurements was examined using Kolmogorov–Smirnov test. Spearman and Pearson correlation analyses were performed. Correlation was considered valid and significant when the r-value was >.24 and the p-value was <.05. Data obtained by the measurement were expressed as mean±standard deviation, and data obtained by counting were expressed as figures and percentages (%). In the statistical evaluation, a p-value of <.05 was considered significant.

Results

Only 8 patients were using an antidepressant in the patient group, and a familial history of psychiatric disease was present in the first-degree relatives of 5 patients.

When the DSM-IV diagnoses found in the patient group and the distribution in the group was examined, it was observed that 14 patients (28%) had no diagnosis, 13 (26%) had a diagnosis of major depression, 6 (12%) had a diagnosis of dysrhythmic disorder, 13 (26%) had a diagnosis of anxiety disorder, 2 (4%) had a diagnosis of dysrhythmic disorder and somatization disorder, and 2 (4%) had a diagnosis of obsessive compulsive disorder (4%). When the patient and control groups were compared in terms of the presence of AS by the independent t-test, a statistically significant difference was found in the scores obtained from BDS ($p=.001$). The mean BDS score was found to be 14.28 ± 8.33 in the patient group and 8.8 ± 7.91 in the control group ($p=.001$). The mean BAS score was found to be 18.22 ± 8.09 in the patient group and 8.80 ± 7.91 in the control group ($p=.000$). A statistically significant difference was found when the 2 groups were compared in terms of TAS and RSES (Table 1 and Table 2).

No linear relation was found between the BDS score and the duration (years) of pain.

Discussion

AS is a chronic inflammatory disease with an unknown cause (1). The chronicity of the disease and functional disorders it creates lead to difficulties in patients, and this predisposes to the occurrence of psychiatric complaints. Although there are few studies related to the psychiatric state of patients with AS, there is no study examining alexithymia and self-esteem in these patients according to our research. In studies performed in our country and in a study conducted by Karan et al. (27), the level of depression was found to be higher in these patients than in the control group. In a study conducted by Eren et al. (5), a significant difference was found in the levels of depression and anxiety in these patients than in the control group, and disability and a significant decrease in the quality of life were found in these patients. In the study by Özgül et al. (28), it was reported that a significant decrease was found in the quality of life in these patients. In our study, a significant increase was found in the levels of depression in accordance with literature. In a study conducted by Barlow et al. (29) with patients with AS, it was reported that a high level of depression was found in approximately 1/3 of these patients and that women were more depressive than men. It was reported that pain was a major determinant in women and was less important in men. In our study, the difference between men and women in terms of depression could not be evaluated because the number of female patients was insufficient for this evaluation. In a study conducted by Karkucak et al. (39), it was reported that the levels of depression and anxiety were higher in patients with AS than in the control group and that social and psychological support greatly contributed to success in the treatment of AS. In a study conducted by Jang et al. (31), it was reported that receiving help and depression would be treatment targets for decreasing function-

al limitations in the future in patients with AS. In literature, the levels of anxiety have also been reported to be high in patients with AS (27). In our study, the levels of anxiety were found to be significantly higher than in the control group. Güleç et al. (32) reported that the scores of depression and alexithymia were significantly higher in the fibromyalgia group than in the healthy control group in a study they conducted with women who had fibromyalgia, though there is no study examining alexithymia and self-esteem in patients with AS as mentioned before. Alexithymia was primarily thought to be a personal characteristic of patients with psychosomatic diseases and was interpreted as the way of the response of the individual to distress by developing physical symptoms (32). It was used by Sifneos for the first time to define the state of absence of a person's ability to perceive the emotions of oneself and others. Difficulty is experienced in recognizing and describing oneself (33). In various studies, it has been reported that alexithymic properties are more frequently observed in patient groups diagnosed with psychiatric diseases with predominant somatic symptoms and in normal populations with somatic complaints (34,35,36). Depression is a diagnosis group was frequently examined in studies related with alexithymia, and it has been reported that alexithymia affects disease severity in patients with depression (37,38). In our patient group, alexithymic properties, depression and anxiety were found at a higher rate.

Self-esteem expresses personal and integral emotions of self-value, self-reliance, or self-acceptance. It focuses on the need of human beings for self-evaluation or positive self-evaluation. A person having a high self-esteem evaluates oneself positively and feels good about his/her strong aspects (11,12). In a study conducted by Kılıç et al. (39), it was reported that negative self-perception in adolescents accompanied mostly introversion problems, including depression and anxiety, and was associated with extraversion problems to a lower rate. In a study conducted by Aslan et al. (40), it was reported that disease-related properties were related to depression, anxiety, alexithymia, body perception, and self-esteem in female patients with rheumatic arthritis. In our study, a significant difference was found in terms of alexithymia and self-esteem than in the control group. However, its relation with disease severity was not examined.

Alexithymia and self-esteem, which may lead to changes in clinical picture especially in depression and anxiety, should be considered by clinicians in chronic and progressive diseases including AS. There are only a few studies in this area. This should be evaluated in patients who do not respond to treatment or in those who have been receiving medical treatment at a high dose for a long time. More studies are needed in this area.

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