Symptoms of rheumatoid arthritis and fibromyalgia and their relationship with anxiety

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INTRODUCTION

Rheumatoid arthritis is a chronic autoimmune disease with variable characteristics in terms of prognosis and disease status. In RA, the immune system is impaired and the body perceives its own tissue as foreign and begins to defend against it. Evaluation of the functional and psychosocial losses that occur in the patient has an important place in the evaluation of the disease. Functional capacity and mood disorders of the patients during the day greatly affect their quality of life. Different clinics have the same when looking at the quality of life of patients, differences can sometimes be seen. 1-3

Fibromyalgia syndrome (FMS) is a non-inflammatory soft tissue rheumatism that causes widespread pain and mainly affects the muscular system.

While there is still no complete explanation as to the cause of pain for FMS, the cause of pain for RA is explained by inflammation in the joints and structural destruction of the joint. In general, rheumatic diseases (fibromyalgia, osteoarthritis, rheumatoid arthritis, SLE (systemic lupus erythematosus), Behçet’s disease) etc. Depression is observed at higher levels in most of them. Clinical depression is observed at a rate that is exactly 2 times higher than the normal rate in these patients. 2.

It has been shown in various studies that fibromyalgia (FMS) and rheumatoid arthritis (RA) are together with psychiatric diseases. 15

Rheumatoid arthritis causes deformities in advanced stages, creates an inability for patients to perform their daily tasks, and as a result, causes negative interactions in life activities. At the same time, the effects of this situation created by the disease can be seen in all areas of life, such as family life, social relations and business life. 4 With the addition of pain felt due to exacerbations that occur as the disease progresses, the frequency of mental disorders, especially depression, increases.

In cases of systemic involvement in RA patients, these problems increase more. Considering all these, it is inevitable that the person’s psychological structure is affected. When we look at the studies on this situation, it has been revealed that in some cases, mental disorders are related to the etiology of the disease, while in others, they are related to exacerbations of the disease. 7

Ongoing chronic pain in RA and FMS causes disorders in the social life of patient individuals, therefore, the individual’s quality of life decreases as a result of being away from many activities and life, which leads to psychiatric problems such as depression and anxiety.

Even if this depressive state is not a well-established condition in the patients, the presence of psychological stress is highly
observed in these patients. The reasons for the high depressive state in the patients are various. The physical limitations experienced by the patients, the high levels of pro-inflammatory cytokines, the helplessness caused by the chronic pain. This picture of having a chronic disease also reveals the relationship between the disease and depression.

As a result of the complications seen as a result of the disease, serious decreases are observed in the life expectancy and quality of life of the patients. Chronic pain, seen in most patients, is one of the factors that directly affects the quality of life. As it is known, the main purpose in the follow-up and treatment of RA is to slow down or stop the progression of the patient's disease; joint It is the training of preserving the existing functions of the muscles and muscles, controlling pain and inflammation, protecting the joints in daily life and making them self-sufficient.

The aim of the study is to reveal the development of depression and anxiety in patients with FM and RA and their relationship with the level of pain.

**MATERIAL AND METHOD**

The study included 50 patients each, who were diagnosed with RA and FMS and treated according to the 2010 ARA criteria, and a control group without any complaints. The necessary approval was received for the study from the local ethics committee of Şü Beyazgül Training and Research Hospital (11.06.2021/799).

In the selection of patients with RA, 1- Those with systemic disease, 2- Those with secondary rheumatic disease, and 3- Those with any psychiatric disease were excluded.

Among those with FMS, those with primary or secondary psychiatric diseases were excluded.

RA and FMS patients were selected from those with an average disease duration of 5-10 years.

Patient findings were recorded with a classical data form, and the development process of the disease, how the disease started, where the joint involvement started, the patient's daily capacity, existing deformities, any factors that caused the disease, and quality of life were evaluated in the light of laboratory findings.

Pain was evaluated with VAS, depression status was evaluated with Beck depression scale and Zung depression scale, and anxiety status was evaluated with Health Assessment Questionnaire (HAQ). With these data collected, there was a significant difference between the patients and the control group, and subsequently, the clinical picture in the patient group was evaluated as anxiety and depression. Its relationship with the level was examined.

The data obtained as a result of the study were evaluated in the SPSS program and independent student t test was used to compare the patient and control groups; The X2 test was used to compare categorical variables, and the Fisher exact test was used in groups with a small number of cases.

**RESULTS**

The mean ages of the RA patient and control groups were 50.0±11.14 (25-63) and 48.40±19.67 (22-65), respectively. There were 38 women and 12 men in the patient and control groups, and there was no statistical difference between them in terms of age and gender (p>0.05).

Pain and anxiety and depression levels were higher in all FMS patients compared to the RA patient and control groups (p<0.001). Depression and anxiety and related findings were higher in FMS patients than in RA patients (p<0.001). There were findings of depression in 20 patients with FMS and 15 patients with RA. Similarly, a statistically significant relationship was found between anxiety and depression and pain in patients with RA (p<0.001).

It was observed that the depression data of the participants in the diseased group were higher than the participants in the healthy group. In particular, statistical significance was detected between the depression data of the diseased and healthy individuals (p<0.001).

**DISCUSSION**

The relationship between the disorder and anxiety caused by chronic pain is that it may be caused by the time it is present or it may be a symptom of an already existing condition.

The increased observation of illness and anxiety in FMS is also considered as the first symptom of psychiatric diseases or psychological disorders of FMS.

Matcham et al. found a demonstrable rate of 9.5-41.5% in patients with rheumatoid arthritis. The immune system level of patients with RA and resistant to stress has been evaluated with different studies regarding its effectiveness.

There are data comparing RA and FMS patients according to their levels. In the studies of Ataoglu et al., no relationship was found between fibromyalgia and infection symptoms, but a relationship with rheumatoid arthritis was observed.

It has been determined that there is an effective relationship between variability in some parameters and pain level.

It is also a fact that during the development of rheumatoid arthritis and the settling of the clinical picture, the disease can change by influencing the immune system of psychological patients.

In chronically chronic diseases, the progressive spread of the current course leads to delays in the prevention of viruses present in the patient.

In the treatments used by patients with RA (steroids, interferon, immunosuppressives, etc.), although rare, it is also observed that the complex formation is present or the side effects are increased.

As a result, this study revealed that there was a significant relationship between pain and depression and anxiety levels for both groups, and therefore the lives of patients with RA and FMS were negatively affected. When we look at the studies conducted in this sense, it has been revealed that the quality of life scores of patients with RA who show serious exacerbations and severe pain are much more affected than those of patients who show moderate and moderate activation, as a result of the measurements taken from individuals. In addition, it turns out that anxiety, depression and feeling bad are much higher in patients with RA than in the general population.

In our study, a positive relationship was found between depression, anxiety and pain. In this respect, it shows that evaluating the long-term development of depression and anxiety in RA and FMS patients in terms of quality of life is necessary during the treatment and follow-up periods of the disease.

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