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CLINICAL MEDICINE OBSERVATIONAL RESEARCH

TREATMENT, DISEASE CONTROL, QUALITY OF LIFE AND PSYCHOLOGICAL STATUS IN PATIENTS WITH ANKYLOSING SPONDYLITIS DURING THE COVID-19 PANDEMIC

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Yasemin Tombak[1*] https://orcid.org/0000-0003-0065-5376
Ayse Elif Sen[1] https://orcid.org/0000-0003-1395-6346
Methiye Kubra Sezer[1] https://orcid.org/0000-0003-3453-2518
Ajda Bal[1] https://orcid.org/0000-0002-3910-2851
Emel Eksioglu[1] https://orcid.org/0000-0002-7695-0614
Deniz Dulgeroglu[2] https://orcid.org/0000-0003-2491-1717
Buse Ercan Bati[3] https://orcid.org/0009-0006-7316-2168
Ozgur Zeliha Karaahmet[1] https://orcid.org/0000-0002-1338-8935

***Corresponding author:**
Tombak Yasemin, MD, Physical Medicine and Rehabilitation, Ankara Etlik City Hospital, Varlik Mh. Halil Sezai Erkut Cd. No:5, 06170 Yenimahalle, Ankara, Turkey;
E-mail: yasemintombak@hotmail.com

Abstract

Introduction. The coronavirus disease (COVID-19) pandemic has the potential to impact disease activity and psychological well-being in people with rheumatic diseases. This study aimed to compare ankylosing spondylitis (AS) patients with and without COVID-19 history in terms of treatment, disease control, quality of life and psychological status by providing a cross-sectional look at treatment, disease control, quality of life and psychological status in patients with AS during the COVID-19 pandemic.

Methods. The study included 74 AS patients, in two groups based on COVID-19 history. Demographic data and clinical characteristics were recorded. Treatment, disease control, functional status, and quality of life were evaluated using Bath Ankylosing Spondylitis Disease Activity Index, Bath Ankylosing Spondylitis Functional Index (BASFI), and impact of COVID-19 on quality-of-life scales. Psychological status was assessed using the Beck Depression Inventory, Beck Hopelessness Scale, and COVID-19 anxiety scale.

Results. Of the 74 patients diagnosed with AS, 44 were female and 34 were male. The mean age was 47.3 years. In total, 35 patients (47.3%) had COVID-19. We found that the group without COVID-19 had significantly higher levels of hypothyroidism than the other group ($p = 0.008$). The BASFI value was significantly higher in the COVID-19 group ($p = 0.031$). The group with COVID-19 had a substantially higher rate of continuing non-anti-rheumatic drug use than the other group ($p = 0.02$).

Conclusion. During COVID-19 pandemic period, the majority of patients continued their medication, so treatment and disease control were not negatively affected. Having COVID-19 did not cause a significant difference psychologically.

Keywords: Anxiety, COVID-19, Depression, Quality of life, Rheumatic diseases

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ABBREVIATIONS

AS: Ankylosing spondylitis
ASDAS: Ankylosing Spondylitis Disease Activity Score
BASDAI: Bath ankylosing spondylitis disease activity index
BASFI: Bath ankylosing spondylitis functional index
BDI: Beck depression inventory
BHS: Beck hopelessness scale
BMI: Body mass index
CAS: COVID-19 anxiety scale
csDMARDs: disease-modifying antirheumatic drugs
COVID-19: the coronavirus disease
COV19-QoL: the COVID-19 impact on quality-of-life scale
CRP: C-Reactive Protein
ESR: Erythrocyte sedimentation rate
HADS: Hospital anxiety and depression scale
RA: Rheumatoid arthritis
SARSCoV-2: Severe acute respiratory syndrome coronavirus 2
TNFi: tumor necrosis factor inhibitors
VAS: Visual analogue scale

INTRODUCTION

Severe acute respiratory syndrome coronavirus 2 (SARSCoV-2), the seventh human coronavirus, was discovered in January 2020 during the recent pneumonia outbreak in Wuhan, Hubei province, China [1,2].

On March 11, 2020, the first coronavirus disease (COVID-19) case was discovered in Turkey. Over time, the number of instances in our nation and around the world has increased.

The rising case and death rates, as well as the continual coverage of the epidemic in the media, may make everyone more concerned, particularly those with chronic conditions and those taking immunosuppressive medicines.

Social isolation, quarantine, and uncertainties regarding COVID-19 have led to an increase in disorders such as anxiety, depression, stress and insomnia in both the patient and healthy population [3,4,5].

The COVID-19 epidemic has made it harder to treat and monitor people suffering from rheumatic diseases. Individuals with rheumatic disorders have been shown to be at a higher risk, particularly those who use immunosuppressive medicines, and they have been encouraged to follow more stringent restrictions [3].

Fear of contracting COVID-19, social isolation, and quarantines have made it difficult for patients to access treatment. During this period, most patients did not want to go to doctor's follow-ups and some of them stopped taking their medications [6].

This study aimed to compare ankylosing spondylitis (AS) patients with and without COVID-19 history in terms of treatment, disease control, quality of life and psychological status by providing a cross-sectional look at treatment, disease control, quality of life and psychological status in patients with AS during the COVID-19 pandemic.

MATERIALS AND METHODS

The study was conducted after obtaining approval from the local ethics committee (University of Health Sciences, Diskapi Yildirim Beyazit Education and Research Hospital, Ankara, Turkey, Decision no:128/02 dated 10.01.22), consent from the participants, and in accordance with the Declaration of Helsinki.

Inclusion criteria:
• Being diagnosed with AS in accordance with the 1988 Modified New York criteria
• Volunteer
• Being between the ages of 20-65
Exclusion criteria:
• Having another orthopedic, neurological or cognitive disease other than AS
• Pregnancy

The study involved 74 patients. Patients were separated into two groups based on whether they had COVID-19.

In our study, the patients' demographic data (age, gender, education level, occupation, body mass index (BMI)), clinical characteristics (comorbidities, extra-articular involvement, duration of disease, medications

used, duration of medication use), check-up status in the last year, whether they continued their medications, history of hospitalization due to COVID-19, history of COVID-19 in the family, worsening of financial situation and/or change of job during the COVID-19 pandemic were recorded.

Treatment and disease control were assessed using the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), functional status with the Bath Ankylosing Spondylitis Functional Index (BASFI), and quality of life using the COVID-19 impact on quality-of-life scale (COV19-QoL). Psychological status was assessed using the Beck depression inventory (BDI), Beck hopelessness scale (BHS), and COVID-19 anxiety scale (CAS).

BASDAI: This index evaluates disease-specific symptoms such as fatigue, spinal and peripheral joint pain, swelling, morning stiffness. It is a reliable and sensitive index developed to evaluate the activity and progression of the disease. The score obtained from the index varies between 0-10. High scores indicate increased disease activity. A BASDAI score greater than 4 indicates active disease [7,8].

BASFI: It is a fast and easy-to-apply, sensitive and reliable index developed for the identification and follow-up of functional ability in AS patients. It consists of a total of 10 items, eight of which are related to the patient's functional activities and two that evaluate the patient's ability to cope with daily life. For each item, the final score is obtained by dividing the total score by 10 using a visual analogue scale (VAS) (0 is easy, 10 is not possible) in the range of 0-10 cm. The score received varies between 0-10. Higher scores indicate more functional limitations [9].

COV19-QoL: This scale consists of the following six questions: “I think my quality of life is lower than before”, “I think my mental health has deteriorated”, “I think my physical health may deteriorate”, “I feel more tense than before”, “I feel more depressed than before”, “I feel that my personal safety is at risk”. Each question is given a score between 1 and 5, where 1 means I strongly disagree and 5 means I strongly agree. Total score is calculated by dividing by the number of items [10].

BDI: This is a self-report scale developed by Beck in 1961 to measure emotional, cognitive, somatic and motivational components. The scale consists of 21 items, two items are devoted to emotions, eleven items to cognitions, two items to behaviors, five items to physical symptoms, and one item to interpersonal symptoms. Patients were asked to choose one of these questions that best suited their situation. Each question was given points as 0, 1, 2, 3, and scores ranging from 0 to 63 were obtained. The results were evaluated as 0-9 as no/minimal depression, 10-18 as mild depression, 19-29 as moderate depression, and 30-63 as severe depression. The validity and reliability of BDI, which is used to determine the intensity of depression, for the Turkish population was determined by Tegin [11,12].

BHS: This scale was developed by Beck et al. in 1974. A validity and reliability study was conducted in our country. According to the BHS scale key, which includes 11 "correct" and 9 "incorrect" answers, "1" point is given for each compatible answer and "0" point is given for each incompatible answer. The resulting arithmetic total constitutes the “despair score”. BHS has no cut-off score, the possible variability of scores is between 0 and 20. The higher the scores, the higher the individual's hopelessness level is [13,14].

CAS: The scale consists of the following five items.
1. I felt dizzy, light-headed, or faint when I read or listened to news about the coronavirus.
2. I had trouble falling asleep or staying asleep because I was thinking about the coronavirus.
3. I felt paralyzed or frozen when I thought about or was exposed to information about the coronavirus.
4. I lost interest in eating when I thought about or was exposed to information about the coronavirus.
5. I felt nauseous or had stomach problems when I thought about or was exposed to information about the coronavirus.

Individuals mark their experiences in the last two weeks (0- Never, 1- Rarely, less than one or two days, 2- A few days, 3- More than seven days, 4- Almost every day in the last two weeks). The minimum score that can be obtained from the scale is zero, the maximum score is twenty [15].

Data analysis

Data analysis was done with the SPSS for Windows 22.0 package program. Whether continuous variables showed a normal distribution was examined with the Shapiro Wilks test. Descriptive statistics were shown as mean ± standard deviation or median (minimum-maximum) for continuous variables, and as number of observations and (%) for nominal variables. The significance of the difference between the paired groups in terms of all parameters and continuous variables was investigated with the Mann Whitney U test. Nominal variables were evaluated with Pearson's

Chi-Square test. Results were considered significant for $p<0.05$.

RESULTS

Of the 74 patients diagnosed with AS, 44 were women and 34 were men. We found the mean age to be 47.3. In total, 35 patients (47.3%) had COVID-19.

Patients generally had a mild recovery from COVID-19, and only two patients had a history of hospitalization.

The demographic data and clinical features of all patients are shown in Table 1, and the comparison of demographic and clinical features of the group with and without a history of COVID-19 is shown in Table 2.

There was no significant difference in demographic and clinical characteristics between the groups with and without COVID-19 in terms of other parameters, except for the presence of hypothyroidism, BASFI score and the rate of continuing non-anti-rheumatic drugs (Table 2).

We found hypothyroidism to be significantly higher in the group that did not have COVID-19 compared to the other group.

We found the BASFI value to be significantly higher in the group with COVID-19.

The rate of continuation of medications other than anti-rheumatic drugs in the group that had COVID-19 was found to be significantly higher than the other group.

DISCUSSION

In our study, we found that the majority of patients diagnosed with AS continued taking both anti-rheumatic drugs and medications related to their other diseases. The rate of continuation of non-anti-rheumatic drugs in the group that had COVID-19 was found to be significantly higher. We found hypothyroidism to be significantly higher in the group that did not have COVID-19 compared to the other group. We found the BASFI value to be significantly higher in the group with COVID-19.

Gica et al., in their study including AS, rheumatoid arthritis (RA) and healthy volunteers, found that patients with RA and AS had lower psychological general well-being index scores and higher Hospital Anxiety and Depression Scale (HADS) depression and anxiety subscale scores compared to healthy individuals. Almost all psychometric evaluation test scores were found to be worse in AS patients with high disease activity compared to those with low disease activity. A positive correlation was found between BASDAI and most psychometric assessment test scores [4].

Lopez et al. investigated whether the disease activity scores of patients with RA and axial spondylarthritis changed during the pandemic period and observed that there was a worsening of disease activity in 37.4% of the patients [16].

The change in disease activity of individuals with AS in Taiwan was investigated before, during and after the COVID-19 wave in Taiwan. BASDAI, Ankylosing Spondylitis Disease Activity Score (ASDAS)-C-reactive protein and ASDAS-erythrocyte sedimentation were recorded for 126 AS patients. They found disease activity worsened after the 2021 wave of COVID-19 in Taiwan [17].

Since we did not look at the activity scores and erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels of the pre-pandemic period, we cannot reach conclusions about the effect of the pandemic on disease activity. However, we can comment that the disease activity is not affected much due to the high rate of medication continuation of the patients. Additionally, there was no significant difference in disease activity between the groups with and without COVID-19.

AS patients treated with conventional synthetic disease-modifying antirheumatic drugs (csDMARDs) and tumor necrosis factor inhibitors (TNFi) did not show worse outcomes in terms of symptom burden or recovery compared to those without drugs in mild-to-moderate COVID-19 [18].

In our study, there was no significant difference in the use of biological drugs between the groups that had and did not have COVID-19.

Even in patients not infected with SARS-CoV-2, coping with the COVID-19 outbreak was associated with physical and psychological effects associated with rheumatic disease. According to the patients, these effects negatively affected their rheumatic diseases [19].

Picchianti Diamanti et al. found that patients with rheumatological diseases such as RA and AS experienced severe anxiety during the pandemic [20]. Since we did not compare it with healthy volunteers, we cannot comment on the increase in anxiety during the pandemic period in AS, but we showed that whether or

not you have had COVID-19 does not make a difference when it comes to measuring the effect of COVID-19 anxiety and COVID-19 on quality of life. Likewise, we found that having COVID-19 did not make a significant difference in depression and hopelessness in patients diagnosed with AS.

In their study where Khalik et al. examined a total of 120 RA patients, they found the prevalence of patients with a recent history of COVID-19 infection to be 40.8%. COVID-19 infection and disease duration have been shown to be significant predictors of depression and anxiety. Depression scores have been shown to be positively related to age and disease activity scores [21].

We found that the rate of COVID-19 history in AS was 47.3%.

It has been determined that anxiety levels are also high in pediatric patients diagnosed with COVID-19 [22].

The COVID-19 pandemic has been shown to have an impact on quality of life and anxiety levels in people with RA and AS in New Zealand [3].

We did not detect any difference in anxiety between the group that had COVID-19 and the other group.

Batty et al reported that the risk of COVID-19 is higher in patients with disadvantaged education levels and professions [23].

We did not detect any significant difference in terms of education level and profession between the groups that had and did not have COVID-19.

In a study examining 40 AS patients using anti-TNF, it was stated that the use of TNF-α inhibitors in patients with AS may be associated with a decrease in hospitalization and mortality rates in COVID-19 cases [24].

Among our patients, 57.1% (20 patients) of the group who had COVID-19 were using biological DMARDs. Only 2 patients out of 20 had a history of hospitalization due to COVID-19. Most of them survived the disease mildly under home conditions.

In a study investigating patients diagnosed with AS during the pandemic period, they found a relationship between BASFI and sleep quality. It was determined that the stress perceived by AS patients during the COVID-19 pandemic was moderate, and 50% of the participants had symptoms of anxiety and 33.3% of them had symptoms of depression [25].

We found the BASFI value to be significantly higher in the group with COVID-19. This may be related to the longer duration of AS disease in this group.

Fear of contracting COVID-19, social isolation, and quarantines have made it difficult for patients to access treatment. During this period, most patients did not want to go to doctor's follow-ups and some of them stopped taking their medications [6].

In our study, we found that the majority of patients diagnosed with AS continued taking both anti-rheumatic drugs and medications related to their other diseases. We think that this is due to the fact that during the pandemic period in our country, patients can buy their registered medications directly from the pharmacy without having them prescribed in the hospital.

It has been determined that COVID-19 may be a potential risk factor for hypothyroidism. Therefore, the need to monitor the thyroid function of patients infected with SARS-CoV-2 is emphasized [26].

Surprisingly, we found hypothyroidism to be significantly higher in the group that did not have COVID-19. We thought that this condition was not a thyroid dysfunction caused by COVID-19 but a pre-existing comorbidity.

The COVID-19 pandemic has been reported to cause higher levels of anxiety, depression and trauma symptoms compared to previous community studies in the UK. Anxiety and depression symptoms were found to be higher in those with low income, those with income loss, and those with pre-existing health problems in themselves or their families [27].

We found that some patients had to change jobs and the financial situation of some of them worsened due to the pandemic.

CONCLUSIONS

We may conclude that COVID-19 has no detrimental psychological effects on AS. However, because we were unable to assess the psychological condition before the pandemic, which is also a study constraint, we are unlikely to remark on the primary effect of the COVID-19 pandemic on psychology in AS patients.

During the COVID-19 pandemic period, the majority of patients continued their medication, so treatment and

disease control were not negatively affected. However, when it comes to functionality, the BASFI score was found to be higher (worse) in the group that had COVID-19. COVID-19 did not have a meaningful influence on the quality of life or anxiety scales.

AUTHORS' CONTRIBUTIONS

Concept: YT, AB, EE, DD, OZK
Drafting or revising it critically: YT, AB, EE, OZK
Data Collection or Processing: YT, AB, AES, MKS, DD, BEB
Analysis or Interpretation: YT, OZK, AES
Literature Search: YT, AB, OZK, BEB
Writing: YT, AB, OZK
Supervision: YT, AB, OZK
Final approval: All listed authors

CONFLICTS OF INTEREST

None

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References

1. Zhou P, Yang XL, Wang XG, Hu B, Zhang L, Zhang W, et al. A pneumonia outbreak associated with a new coronavirus of probable bat origin. Nature 2020;579(7798):270-273.
2. Wu F, Zhao S, Yu B, Chen YM, Wang W, Song ZG, et al. A new coronavirus associated with human respiratory disease in China. Nature 2020;579(7798):265-269.
3. Johnstone G, Treharne GJ, Fletcher BD, Lamar RS, White D, Harrison A, et al. Mental health and quality of life for people with rheumatoid arthritis or ankylosing spondylitis in Aotearoa New Zealand following the COVID-19 national lockdown. Rheumatol Int 2021;41(10):1763-1772.
4. Gica SS, Akkubak Y, Aksoy ZK, Kucuk A, Cure E. Effects of the COVID-19 pandemic on psychology and disease activity in patients with ankylosing spondylitis and rheumatoid arthritis. Turk J Med Sci 2021;51(4):1631-1639.
5. Ingegnoli F, Buoli M, Posio C, Di Taranto R, Lo Muscio A, Cumbo E, et al. COVID-19 related poor mental health and sleep disorders in rheumatic patients: a citizen science project. BMC Psychiatry 2021;21(1):1-9.
6. Seyahi E, Poyraz BC, Sut N, Akdogan S, Hamuryudan V. The psychological state and changes in the routine of the patients with rheumatic diseases during the coronavirus disease (COVID-19) outbreak in Turkey: a web-based cross-sectional survey. Rheumatol Int 2020;40(8):1229-1238.
7. Garrett S, Jenkinson T, Kennedy LG, Whitelock H, Gaisford P, Calin A. A new approach to defining disease status in ankylosing spondylitis: the Bath Ankylosing Spondylitis Disease Activity Index. J Rheumatol 1994;21(12):2286-2291.
8. Zochling J. Measures of symptoms and disease status in ankylosing spondylitis: Ankylosing Spondylitis Disease Activity Score (ASDAS), Ankylosing Spondylitis Quality of Life Scale (ASQoL), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), Bath Ankylosing Spondylitis Global Score (BAS-G), Bath Ankylosing Spondylitis Metrology Index (BASMI), Dougados Functional Index (DFI), and Health Assessment Questionnaire for the Spondylarthropathies (HAQ-S). Arthritis Care Res (Hoboken) 2011;63(S11):S47-S58.
9. Calin A, Garrett S, Whitelock H, Kennedy LG, O'hea J, Mallorie P, et al. A new approach to defining functional ability in ankylosing spondylitis: the development of the Bath Ankylosing Spondylitis Functional Index. J Rheumatol 1994;21(12):2281-2285.
10. Sumen A, Adibelli D. Adaptation of the COV19-QoL Scale to Turkish culture: Its psychometric properties in diagnosed and undiagnosed individuals. Death Studies 2022;46(10):2298-2305.
11. Sorias O. Psikiyatrik derecelendirme olcekleri. Gulec C, Koroglu E (eds). Psikiyatri Temel Kitabı. Cilt. Ankara 1998:81-93.
12. Tegin B. Depresyonda bilissel surecler, Beck modeline göre bir inceleme. Psikoloji Dergisi 1987;6:116-121.
13. Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: the hopelessness scale. J Consult Clin Psychol 1974;42(6):861-865.
14. Durak A, ve Palabiyikoglu, R. Beck Umutsuzluk Olcegi (BUO) gecerlik ve guvenirlik calismasi. Kriz Dergisi 1994;2(2),311-319.
15. Koc H, Arslan C. Adaptation and psychometric evaluation of the turkish version of the coronavirus anxiety scale. J Cogn Psychother 2021;2(10):146-154.

16. López-Medina C, Ladehesa-Pineda L, Gómez-García I, Puche-Larrubia MÁ, Sequí-Sabater JM, Armenteros-Ortiz P, et al. Treatment adherence during the COVID-19 pandemic and the impact of confinement on disease activity and emotional status: a survey in 644 rheumatic patients. Joint Bone Spine 2021;88(2):105085.
17. Huang PJ, Chen YW, Yen TH, Liu YT, Lin SP, Chen HH. Investigation of changes in ankylosing spondylitis disease activity through 2021 COVID-19 wave in Taiwan by using electronic medical record management system. Sci Rep 2023;13(1):349.
18. Li Y, Hu Z, Guo Y, Zhao Z, Li K, Wang X, et al. Do disease-modifying antirheumatic drugs and non-steroidal anti-inflammatory drugs increase the burden on ankylosing spondylitis patients with mild-moderate COVID-19? evidence from a retrospective cohort study. Front in Pharmacol 2023;14:1266915.
19. Mancuso CA, Duculan R, Jannat-Khah D, Barbhaiya M, Bass AR, Mehta B. Rheumatic disease-related symptoms during the height of the COVID-19 pandemic. HSS J 2020;16(1):36-44.
20. Picchianti DA, Cattaruzza MS, Di Rosa R, Del Porto F, Salemi S, Sorgi ML, et al. Psychological distress in patients with autoimmune arthritis during the COVID-19 induced lockdown in Italy. Microorganisms 2020;8(11):1818.
21. Abd El-Khalik DM, Eltohamy M. Evaluation of depression and anxiety in rheumatoid arthritis patients during COVID-19 pandemic. Clin Med Insights Arthritis Musculoskelet Disord. 2023 Dec 18;16:11795441231216988.
22. Solmaz A, Karatas H, Ercan TMF, Erat T, Solmaz F, Kandemir H. Anxiety in pediatric patients diagnosed with COVID-19 and the affecting factors. J Trop Pediatr 2022;68(2):fmac018.
23. Batty GD, Deary IJ, Luciano M, Altschul DM, Kivimäki M, Gale CR. Psychosocial factors and hospitalisations for COVID-19: Prospective cohort study based on a community sample. Brain Behav Immun 2020;89:569-578.
24. Movassaghi S, SeyedAlinaghi S, Rostamian A, Najafizadeh SR, Nezhadseifi E. Prevalence and complication of COVID-19 in patients with ankylosing spondylitis (AS) and its relationship with TNF-a inhibitors. Immunity, inflammation and disease 2023;11(6):e915.
25. Acar Y, Ilcin N, Sari I. COVID-19 Pandemisinde ankilozan spondilit hastalarinda stres, anksiyete, depresyon ve uyku kalitesinin incelenmesi. Izmir Katip Celebi Universitesi Saglik Bilimleri Fakultesi Dergisi 2023;8(2):471-475.
26. Zhang Z, Fang T, Lv Y. Causal associations between thyroid dysfunction and COVID-19 susceptibility and severity: a bidirectional mendelian randomization study. Front Endocrinol (Lausanne) 2022;13:961717.
27. Shevlin M, McBride O, Murphy J, Miller JG, Hartman TK, Levita L, et al. Anxiety, depression, traumatic stress and COVID-19-related anxiety in the UK general population during the COVID-19 pandemic. BJPsych Open 2020;6(6):e125.

Table 1. Demographic and Clinical characteristics

	N=74
Age mean (SD)	47.3(10.5)
Gender n (%)	
Female	44(59.5)
Male	30 (40.5)
BMI mean (SD)	33.06(10.5)
Education level n(%)	
Primary school	21(28.4)
Middle school	16(21.6)
High school	22(29.7)
University	15(20.3)
Occupation n(%)	
Housewife	30(40.5)
Officer	15 (20.3)
Self-employment	22(29.7)
Retired	7(9.5)
Comorbidity n(%)	
H.T.	17(23)
Hypothyroidism	7(9.5)
Asthma	7(9.5)
DM	6(8.1)
Heart rhythm disorder	2(2.7)
COPD	1(1.4)
Renal disease	1(1.4)
H.L.	1(1.4)
Disease duration mean (SD)	13.2(9.8)
Duration of drug use mean (SD)	10.7(8.5)
Those using biological DMARDs n (%)	40(54.1)
Extra-articular involvement n(%)	13(17.6)
Those who did not come for a check-up in the last year n (%)	8(10.8)
Those continuing anti-rheumatic drugs n(%)	64(86.5)
Those who continue taking medications other than anti-rheumatic drugs n(%)	52(70.3)
BASDAI mean (SD)	4.05(2.4)
BASFI mean (SD)	3.4(2.7)
COV19-QoL mean (SD)	13.6(4.9)
BDI mean (SD)	12.7(9.1)
BHS mean (SD)	6.3(4.7)
CAS mean (SD)	1.5(3)
COVID-19 history n(%)	35(47.3)
History of hospitalization due to COVID-19 n(%)	2(2.7)
Family history of COVID-19 n(%)	50(67.6)
Job change history due to pandemic n(%)	2(2.7)
Deterioration in financial situation due to pandemic n(%)	18(24.3)

SD: standard deviation, BMI: body mass index, DM: diabetes mellitus, HT: hypertension, HL: hyperlipidemia, BDI: Beck depression inventory, BHS: Beck Hopelessness Scale, BASDAI: Bath Ankylosing spondylitis disease activity index, COV19-QoL: COVID-19 impact on quality-of-life scale, CAS: COVID-19 anxiety scale, DMARD: Disease-modifying antirheumatic drugs, COPD: Chronic obstructive pulmonary disease

Table 2. Comparison of groups with and without COVID-19 history

	Group with a history of COVID-19 (N = 35)	Group without COVID-19 history (N=39)	p
Age mean (SD)	47.3(8.4)	47.2(12.2)	0.931*
Gender n (%)			0.573#
Female	22(62.9)	22(56.4)	
Male	13(37.1)	17(43.6)	
BMI mean (SD)	33.1(11.7)	32.9(9.3)	0.679*
Education level (%)			0.508#
Primary school	11(31.4)	10(25.6)	
Middle school	7(20)	9(23.1)	
High school	8(22.9)	14(35.9)	
University	9(25.7)	6(15.4)	
Occupation n(%)			0.617#
Housewife	13(37.1)	17(43.6)	
Officer	9(25.7)	6(15.4)	
Self-employment	9(25.7)	13(33.3)	
Retired	4(11.4)	3(7.7)	
Comorbidity n(%)			
H.T.	8(22.9)	9(23.1)	0.982#
Hypothyroidism	0(0)	7(17.9)	0.008#
Asthma	4(11.4)	3(7.7)	0.587#
DM	2(5.7)	4(10.3)	0.475#
Heart rhythm disorder	0(0)	2(5.1)	0.174#
COPD	1(2.9)	0(0)	0.288#
Renal disease	1(2.9)	0(0)	0.288#
H.L.	1(2.9)	0(0)	0.288#
Extra-articular involvement n(%)	8(22.9)	5(12.8)	0.257#
Disease duration mean (SD)	14.6(10.6)	11.8(8.9)	0.25*
Duration of drug use mean (SD)	10(8.9)	9.6(8.1)	0.223*
Those using biological DMARDs n (%)	20(57.1)	20(51.3)	0.613#
Those who did not come for a check-up in the last year n (%)	3(8.6)	5(12.8)	0.149*
Those continuing anti-rheumatic drugs n(%)	33(94.3)	31(79.5)	0.063#
Those who continue taking medications other than anti-rheumatic drugs n(%)	29(82.9)	23(59)	0.02#
BASDAI mean (SD)	4(2.5)	4.09(2.4)	0.867*
BASFI mean (SD)	4.1(2.8)	2.8(2.5)	0.031*
COV19-QoL scale mean (SD)	2.5(0.8)	2.1(0.8)	0.076*
BDI mean (SD)	14.6(9.6)	11.1(8.5)	0.096*
BHS mean (SD)	6.3(4.9)	6.2(4.6)	0.978*
CAS scale mean (SD)	2.3(4.07)	0.8(1.6)	0.074*
Story of job change due to pandemic	1(2.9)	1(2.6)	0.566#
Deterioration in financial situation due to the pandemic	9(25.7)	9(23.1)	0.537#

*:Mann -Whitney U Test #:Pearson Chi – square test

SD: standard deviation, BMI: body mass index, DM: diabetes mellitus, HT: hypertension, HL: hyperlipidemia, BDI: Beck depression inventory, BHS: Beck Hopelessness Scale, BASDAI: Bath Ankylosing spondylitis disease activity index, COV19-QoL: COVID-19 impact on quality-of-life scale, CAS: COVID-19 anxiety scale, DMARD: Disease-modifying antirheumatic drugs, COPD: Chronic obstructive pulmonary disease

COVID-19 ПАНДЕМИЯСЫ КЕЗІНДЕ АНКИЛОЗДЫҚ СПОНДИЛИТКЕ ШАЛДЫҚҚАН НАУҚАСТАРДЫҢ ЕМДЕЛУІ, АУРУЛАРМЕН КҮРЕСУІ, ӨМІР САПАСЫ ЖӘНЕ ПСИХОЛОГИЯЛЫҚ ЖАҒДАЙЫ

Түйіндеме

Кіріспе. Коронавирустық аурудың пандемиясы (COVID-19) аурудың белсенділігіне және ревматикалық аурулары бар адамдардың психологиялық әл-ауқатына әсер етуі мүмкін. Бұл зерттеудің мақсаты анкилозды спондилитпен (АС) ауыратын науқастарды емдеу, ауруларды бақылау, өмір сапасы және психологиялық мәртебе тұрғысынан COVID-19 тарихы бар және онсыз салыстыру болды, бұл COVID-19 пандемиясы кезінде АС бар науқастарды емдеу, ауруларды бақылау, өмір сапасы және психологиялық мәртебеге жан-жақты шолу жасады.

Әдістері. Зерттеуге COVID-19 тарихына байланысты екі топқа бөлінген 74 АС пациенттері қосылды. Демографиялық және клиникалық сипаттамалары жиналды. Емдеу, ауруды бақылау, функционалдық күй және өмір сапасы анкилозды спондилит Бат ауру белсенділігінің индексі, анкилозды спондилит Бат функционалдық индексі (BASFI) және COVID-19 өмір сапасына әсер ету шкаласы арқылы бағаланды. Психологиялық мәртебе Бектің депрессия шкаласы, Бектің үмітсіздік шкаласы және COVID-19 мазасыздық шкаласы арқылы бағаланды.

Нәтижелер. АС диагнозы қойылған 74 науқастың 44-і әйел, 34-і ер адам. Орташа жасы 47,3 жасты құрады. Барлығы 35 науқаста (47,3%) COVID-19 анықталды. Біз COVID-19 жоқ топта гипотиреоздың деңгейі басқа топқа қарағанда айтарлықтай жоғары екенін анықтадық (p=0,008). BASFI мәні COVID-19 тобында айтарлықтай жоғары болды (p=0,031). COVID-19 тобында ревматизмге қарсы препараттарды қабылдауды жалғастыру жиілігі басқа топқа қарағанда айтарлықтай жоғары болды (p=0,02).

Қорытынды. COVID-19 пандемиясы кезінде науқастардың көпшілігі дәрі-дәрмектерді қабылдауды жалғастырды, сондықтан бұл емдеу мен аурумен күресуге теріс әсер етпеді. COVID-19 жұқпасы айтарлықтай психологиялық өзгерістерге алып келмеді.

Түйінді сөздер: мазасыздық, COVID-19, депрессия, өмір сапасы, ревматикалық аурулар**.**

Дәйексөз үшін: Томбак Й, Сен АЕ, Сезер МК, Бал А, Эксиоглу Э, Дулгероглу Д, Эрджан Бати Б, Караахмет ОЗ. COVID-19 пандемиясы кезінде анкилоздық спондилитке шалдыққан науқастардың емделуі, аурулармен күресуі, өмір сапасы және психологиялық жағдайы. Орталық Азиялық медицина гипотезасы мен этикасы журналы 2024:5(1):24-34. https://doi.org/10.47316/cajmhe.2024.5.1.02

ЛЕЧЕНИЕ, БОРЬБА С ЗАБОЛЕВАНИЯМИ, КАЧЕСТВО ЖИЗНИ И ПСИХОЛОГИЧЕСКИЙ СТАТУС У ПАЦИЕНТОВ С АНКИЛОЗИРУЮЩИМ СПОНДИЛИТОМ ВО ВРЕМЯ ПАНДЕМИИ COVID-19

Резюме

Введение. Пандемия коронавирусного заболевания (COVID-19) может повлиять на активность заболевания и психологическое благополучие людей с ревматическими заболеваниями. Целью этого исследования было сравнение пациентов с анкилозирующим спондилитом (АС) с и без анамнеза COVID-19 с точки зрения лечения, контроля заболевания, качества жизни и психологического статуса, предоставляя перекрестный взгляд на лечение, контроль заболевания, качество жизни и психологическое состояние. статус у пациентов с АС во время пандемии COVID-19.

Методы. В исследование были включены 74 пациента с АС, разделенные на две группы на основании анамнеза COVID-19. Были записаны демографические данные и клинические характеристики. Лечение, контроль заболевания, функциональный статус и качество жизни оценивались с использованием индекса активности болезни Бехтерева Бата, функционального индекса болезни Бехтерева Бата (BASFI), а также влияния COVID-19 на шкалы качества жизни. Психологический статус оценивался с использованием шкалы

депрессии Бека, шкалы безнадежности Бека и шкалы тревоги по поводу COVID-19. Полученные результаты. Из 74 пациентов с диагнозом АС 44 были женщинами и 34 мужчинами. Средний возраст составил 47,3 года. Всего у 35 пациентов (47,3%) был выявлен COVID-19. Мы обнаружили, что в группе без COVID-19 уровень гипотиреоза был значительно выше, чем в другой группе (p = 0,008). Значение BASFI было значительно выше в группе с COVID-19 (p = 0,031). В группе с COVID-19 наблюдался значительно более высокий уровень продолжающегося употребления непротиворевматических препаратов, чем в другой группе (p = 0,02).

Заключение. В период пандемии COVID-19 большинство пациентов продолжали принимать лекарства, поэтому на лечение и контроль заболевания это не повлияло. Наличие COVID-19 не вызвало значительной психологической разницы.

Ключевые слова: тревога, COVID-19, депрессия, качество жизни, ревматические заболевания.

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