COVID-19

AB1081 FLARES OF RHEUMATOID ARTHRITIS FOLLOWING CORONAVIRUS VACCINATION

R. Hayward[1], Z. Farah[1]. [1]*Northwick Park Hospital, Rheumatology Department, Harrow, United Kingdom*

Background: With the emergence of the Coronavirus vaccine and the clear and important role it provides in maintaining the health of individuals and the population (1), it is important that our patients receive or are recommended the vaccine. We here document a case series of patients who have long-term quiescent rheumatoid arthritis who then experienced a flare of disease activity after receiving a vaccine. This information is important to understand as it allows informed discussions regarding the side effect profile of the vaccine and also the influence this may have on the patient's disease control and future management options.
Objectives: To understand the changes to control of rheumatoid arthritis in those experiencing a flare of disease after receiving the coronavirus vaccine.
Methods: Patients were reviewed in clinic as part of standard care. Individuals with Rheumatoid Arthritis who had experienced a flare defined as a self-reported disease activity score of >5.1 in otherwise stable disease were noted and their response to treatment reviewed. This was a review of usual clinical practice and did not alter the treatment undertaken or monitoring of the patent. Information obtained was through the consultation with a rheumatologist and the data was collected retrospectively through review of clinical notes and clinic letters.
Results: The table below outlines the patient details and treatment responses. All flares occurred within two weeks of receiving the vaccine. Of the patients who flared, two required short term steroid treatment; three an increase in the usual medications and one who had been in disease remission to re-start previous therapy. More patients in the Pfizer vaccine group required an escalation of usual care compared to the AstraZeneca vaccine group.

Table 1

Antibody status	Vaccine brand	Time since diagnosis	Time since last flare	Flare after 1st or 2nd dose	Usual treatment	Flare management
Seropositive, anti-CCP positive	AstraZeneca	13 years	3 years	1st	Etanercept, Methotrexate	Intramuscular Methylprednisolone
Seropositive, anti-CCP positive	AstraZeneca	11 years	4 years	1st	Etanercept, Sulfasalazine	Intramuscular Methylprednisolone, local joint injection
Seronegative, anti-CCP negative	AstraZenica	13 years	2 years	1st	Methotrexate	Increase methotrexate dose
Seronegative, anti-CCP positive	Pfizer	23 years	11 years	1st	Infliximab	Local joint injection, reduce interval of infusions
Seronegative, anti-CCP positive	Pfizer	7 years	3 years	2nd	Sulfasalazine, hydroxychloroquine	Increase Sulfasalazine dose
Seropositive, anti-CCP positive	Pfizer	7 years	4 years	2nd	nil	Re-start methotrexate, hydroxychloroquine

Conclusion: We report 6 cases of rheumatoid arthritis flare soon after receipt of the coronavirus vaccine. In all, disease control was returned with minimal changes to treatment, 42% of those requiring either no treatment or an intramuscular steroid injection alone. Therefore, we recommend that clinicians should counsel patients of this potential effect, but continue to advocate the vaccine, as the risk of complications to their underlying arthritis is very low and seemingly easily treatable.

REFERENCES:

[1] Tenforde MW, Olson SM, Self WH, Talbot HK, Lindsell CJ, Steingrub JS, et al. Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Among Hospitalized Adults Aged ≥65 Years - United States, January-March 2021. *MMWR. Morbidity and mortality weekly report.* 2021; 70 (18): 674-679. Available from: doi: 10.15585/mmwr.mm7018e1

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2022-eular.38

AB1082 FREQUENCY AND SEVERITY OF COVID-19 IN PATIENTS WITH VARIOUS RHEUMATIC DISEASES TREATED REGULARLY WITH COLCHICINE OR HYDROXYCHLOROQUINE

M. Oztas[1], M. Bektaş[2], I. Karacan[3], N. Aliyeva[2], A. Dag[1], S. Aghamuradov[2], S. B. Cevirgen[1], S. Sarı[2], M. Bolayirli[4], G. Can[5], G. Hatemi[1], E. Seyahi[1], H. Ozdogan[1], A. Gul[2], S. Ugurlu[1]. [1]*Turkey, Istanbul University-Cerrahpasa, Department of Medicine,Division of Rheumatology, Istanbul,Turkey;* [2]*Istanbul University, Department of Medicine, Division of Rheumatology, Istanbul,Turkey;* [3]*Istanbul Medeniyet University, Department of Molecular Biology and Genetics, Istanbul,Turkey;* [4]*Istanbul University-Cerrahpasa, Department of Biochemistry, Istanbul,Turkey;* [5]*Istanbul University-Cerrahpasa, Department of Public Health, Istanbul, Turkey*

Background: Several anti-inflammatory drugs which were targeted different mechanisms and investigated for both prevention and treatment for COVID-19.
Objectives: The current study aimed to investigate whether patients regularly using colchicine or hydroxychloroquine (HCQ) have an advantage of protection from COVID-19 or developing less severe disease.
Methods: Patients who were taking colchicine or HCQ regularly for a rheumatic disease including Familial Mediterranean Fever, Behçet's syndrome, Systemic Lupus Erythematosus, Rheumatoid Arthritis and Sjogren's syndrome as well as their healthy household contacts as the control group were included into the study. The clinical data regarding COVID-19 were collected using a standard form, and serum samples were analyzed for anti-SARS-COV-2 nucleocapsid IgG. Patients treated with any biologic or immunosuppressive treatments were not included into the study.
Results: A total of 635 regular colchicine users with their 643 household contacts and 317 regular HCQ users with their 333 household contacts were analyzed. Anti-SARS-Cov2 IgG was positive in 43 (6.8%) regular colchicine users and 35 (5.4%) household contacts (OR=1.3; 95% CI:0.8-2; p=0.3) (Table 1). COVID-19 related symptoms were described by 29 (67.4%) of the patients and 17 (48.6%) household contacts (OR=2.2; 95% CI:0.9-5.5; p=0.09), and hospital admission was observed in five (11.6%) and one (2.9%) of these subjects (OR=4.5; 95% CI:0.5-40.2; p=0.1), respectively (Figure 1). Seropositive subjects were observed in 22 (6.9%) regular HCQ users and 24 (7.2%) household contacts (OR=1.1; CI:0.6-1.9; p=0.8) (Table 1). COVID-19-related symptoms occurred in 16 (72.7%) of the 22 patients and 12 (50%) of 24 household contacts (OR=2.7; 95% CI:0.8-9.1; p=0.1). Three patients (13.6%) were admitted to hospital, while one household contact (4.2%) was hospitalized (OR=3.6; 95% CI:0.3-37.8; p=0.2) (Figure 1). Disease-specific analyses disclosed that there was no significant difference in terms of COVID-19 frequency and severity between a particular disease subset and household contacts (Table 1). Univariate logistic regression analysis showed no effect of age and gender on the SARS-CoV-2 seroprevalence rate among regular colchicine or HCQ users and household contacts (p=0.2 and p=0.7, respectively for colchicine users versus contacts, p=0.7 and p=0.3, respectively for HCQ users versus contacts).

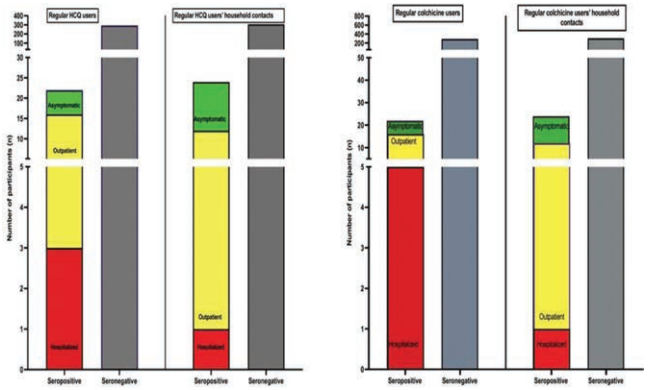


Figure 1. Severity of COVID-19 in regular colchicine or HCQ users and these patients' household contacts

Ann Rheum Dis: first published as 10.1136/annrheumdis-2022-eular.83 on 23 May 2022. Downloaded from http://ard.bmj.com/ on November 1, 2022 at Istanbul University-Cerrahpasa. Protected by copyright.

Table 1. Disease specific outcomes of the entire cohort

Variable	FMF (n=373)	FMF HHC* (n=386)	P	Behcet Patients (n=262)	Behcet HHC (N=257)	P	SLE Patients (N=197)	SLE HH (n=221)	p	RA Patients (n=79)	RA HH (n=73)	P	Sjögren patients (N=41)	Sjögren HH (N=39)	p
Age, mean ± SD years	36.4 ± 13.2	36.3 ± 16.1	0.9	42.9 ± 11.4	38.1 ± 15.2	0.001	44.2 ± 12.6	39.4 ± 17	0.002	53.9 ± 10.3	40.3 ± 16.6	0.001	57.1 ± 11.2	46.2 ± 16.1	0.001
Gender, n (%) Female	249 (66.8)	173 (44.8)	0.001	160 (61.1)	118 (45.9)	0.001	184 (93.4)	75 (33.9)	0.001	73 (61.1)	20 (27.4)	0.001	41 (100)	10 (25.1)	0.001
Positive antibody to SARS-COV-2, n (%)	25 (6.7)	23 (5.9)	0.6	18 (6.9)	12 (4.7)	0.3	14 (7.1)	19 (8.6)	0.6	4 (5.1)	2 (2.7)	0.5	4 (9.8)	3 (7.7)	0.9
Symptomatic COVID-19 in seropositive cases, n (%)	18 (72)	10 (43.4)	0.04	11 (61.1)	7 (58.3)	0.6	11 (78.6)	9 (47.3)	0.07	3 (75)	0 (0)	0.4	2 (50)	3 (100)	0.4
Hospital admission in seropositive cases, n (%)	1 (3.8)	0 (0)	-	4 (22.2)	1 (8.3)	0.3	2 (14.3)	0 (0)	0.2	1 (25)	0 (0)	-	1 (25)	1 (33.3)	0.3
Mean colchicine dose, mg/day ± SD	1.5 ± 0.4	-	-	1.4 ±0.4	-	-	-	-	-	-	-	-	-	-	-
Mean duration of colchicine usage, years ± SD	11.3 ± 8.3	-	-	10.4 ± 7.7	-	-	-	-	-	-	-	-	-	-	-
Mean HCQ dose, mg/day ± SD	-	-	-	-	-	-	263.6 ± 95.1	-	-	255 ± 90.8	-	-	273.7 ± 132.5	-	-
Mean duration of HCQ usage, years ± SD	-	-	-	-	-	-	10.1 ± 6.6	-	-	7.3 ± 5.2	-	-	9 ± 6.3	-	-

HCQ hydroxychloroquine*, FMF familial mediterranean fever, HHC* household contacts, *RA* rheumatoid arthritis, *SLE* systemic lupus erythematosus

Conclusion: Being on a regular treatment of colchicine or HCQ was not resulted in the prevention of COVID-19 or amelioration of its manifestations.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.83

AB1083 MUSCULOSKELETAL MANIFESTATIONS AND POSTCOVID SYNDROME IN HOSPITALIZED PATIENTS INFECTED WITH COVID-19

Ö. Küçülmez[1], G. Gençtoy[2]. *[1]Baskent University Alanya Education and Research Hospital, Physical Medicine and Rehabilitation, Antalya, Turkey; [2]Baskent University Alanya Education and Research Hospital, Nephrology, Antalya, Turkey*

Background: Covid-19 may cause musculoskeletal manifestations or postcovid syndrome (1-3). Molecular mimicry, precursor activation, continue immune activation are held responsible for the development of autoimmunity (4). It has been suggested that SARSCoV-2 infection can cause blockage of lymph vessels since the virüs can infect lymph endothelial cells branching tot he nasal cavity and may cause postcovid syndrome (5).

Objectives: The aim of this study was to characterise the prevalence of musculoskeletal complaints, postcovid syndrome in hospitalized COVID-19 patients and relationship between clinical features and labaratory parameters.

Methods: A single-centre retrospective cohort study was conducted of patients at Baskent University between March 1 and December 31, 2020. The study protocol was approved by the Ethics Committee. Hospitalized patients aged above 18 years, diagnosed with COVID-19 via RT-PCR are included the study. Pregnant patients, those with severe end-stage disease or with missing documentation were excluded. Data were obtained from electronic health records. Information was collected about patient demographics, history and duration of complaints, history of postcovid syndrome, fever or anosmia, respiratory problems, length of stay, history of intensive care and COVID- 19-related biochemical parameters and rheumatologic tests. The corelation between musculoskeletal manifestations, postcovid syndrome and clinical and labaratory parameters were observed. P value<0,05 was considered statistically significiant.

Results: Totaly 109 patiensts included to the study. %39,45 of patients were female (n=66), %60,55 of patients were male (n=43). %34,86 (n=38)of patiens complained about athralgia, %1.83 (n=2) had arthritis and %41,28 (n=45) described fatigue. Postcovid syndrome was determined in %32.11 (n=35) of patients. Positive otoantibody was determined in one patient and arthritis due to paraneoplastic syndrome was detected in a case. There was significiant corelation between fever, length of stay and control CRP (p<0,05). There was significiant corelation between basal CRP and control CRP, length of stay, history of intensive care, oxygen support (p<0,05). There was significiant corelation between postcovid syndrome and arthritis, arthralgia, fatigue (p<0.05) but there was no corelation between postcovid syndrome and basal or control CRP, fever, anosmia, length of stay, intenssive care or oxygen support (p>0.05).

Conclusion: As there was no corelation between musculoskeletal manifestations, postcovid syndrome and labaratory and clinical findings. There should be further studies for understanding mechanisms of musculoskeletal manifestations and postcovid syndrome in SARSCoV-2 infection.

REFERENCES:

[1] Wostyn P. COVID-19 and chronic fatigue syndrome: Is the worst yet to come? Med Hypotheses. 2021 Jan;146:110469.

[2] Cipollaro L, Giordano L, Padulo J, Oliva F, Maffulli N.Musculoskeletal symptoms in SARS-CoV-2 (COVID-19) patients. J Orthop Surg Res. 2020 May 18;15(1):178.

[3] Disser NP, De Micheli AJ, Schonk MM, Konnaris MA, Piacentini AN, Edon DL, Toresdahl BG, Rodeo SA, Casey EK, Mendias CL. Musculoskeletal Consequences of COVID-19. J Bone Joint Surg Am. 2020 Jul 15;102(14):1197-1204.

[4] Shah S, Danda D, Kavadichanda C, Das S, Adarsh MB, Negi VS. Autoimmune and rheumatic musculoskeletal diseases as a consequence of SARS-CoV-2 infection and its treatment. Rheumatol Int. 2020 Oct;40(10):1539-1554.

[5] Kucuk A, Cumhur Cure M, Cure E. Can COVID-19 cause myalgia with a completely different mechanism? A hypothesis. Clin Rheumatol. 2020 Jul;39(7):2103-2104.

Table 1. Corelation between musculoskeletal complaints (arthralgia, arhritis, fatigue), postcovid syndrome and labaratory and clinical parameters

	Basal CRP	Control CRP	Fever	Length of stay
*Arhritis (n=2) P value	0,19	0,28	0,39	0,09
*Arthralgia (n=38) P value	0,57	0,81	0,17	0,89
*Fatigue (n=45) P value	0,73	0,56	0,24	0,35
*Postcovid syndrome (n=35) P value	0,39	0,56	0,11	0,35

* Spearman's corelation test ** Statistically significiant p<0,05

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.201

AB1085 COVID-19 VACCINATION INTENTION AMONG TUNISIAN HEALTH CARE WORKERS

O. Hamdi[1], M. Boudokhane[2], Z. Teyeb[2], I. Abdelaali[2], T. Jomni[2], S. Belakhal[2], M. H. Dogui[2]. *[1]La Rabta Hospital, Rheumatology, Tunis, Tunisia; [2]FSI hospital, Internal Medicine, Tunis, Tunisia*

Background: Health care workers (HCW) are the soldiers in the forefront of the fight against the coronavirus (COVID-19) pandemic. It is therefore a priority target group in the COVID-19 vaccination process.

Objectives: Our purpose was to assess the COVID-19 vaccination intentions of Tunisian HCW and the reason for fear in case of hesitancy.

Methods: We conducted an anonymous online questionnaire in the months of May and June 2021among HCW via social networks. The data collected included demographic characteristics, vaccination intentions, and reasons of hesitancy.

Results: Five- hundred HCW were included in the study. Participants were divided as follows: 74% doctors (15% seniors, 37% juniors, 22% interns), and 26% nurses. The mean age was 34 ± 5 years [24 – 58]. Seventy-three percent of participants were female. A history of chronic illness was noted 150 HCW (30%). A psychiatric disease was noted in 105 participants (21%): anxiety disorder (62%), depression (33%), and bipolar disorder (5%). A treatment was prescribed in 63% of cases: anxiolytics (84.2%), antidepressants (16.6%), and neuroleptics (10%). Psychotherapy was prescribed in 47% of cases. A personal and family history of COVID-19 infection was noted in 50.4 and 55% of cases, respectively. The infection was mild in 91.2% of cases. Four-hundred and five HCW (81%) had the intention to get vaccinated against COVID-19. Twenty participants (4%) refused the vaccine, and 75 (15%) were still hesitant. Vaccination hesitancy was linked to concerns about the safety of a rapidly-developed vaccine in 92% of cases: adverse reactions (95.8%), tolerance (75%), and efficacy (25%). Sixteen percent of hesitant respondents expressed

Ann Rheum Dis: first published as 10.1136/annrheumdis-2022-eular.83 on 23 May 2022. Downloaded from http://ard.bmj.com/ on November 1, 2022 at Istanbul University-Cerrahpasa. Protected by copyright.