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POS1269 CLINICAL COURSE AND OUTCOMES OF COVID-19 INFECTION IN PATIENTS WITH SJOGREN'S SYNDROME TREATED WITH RITUXIMAB.

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Background: Data from multiple rheumatological cohorts have shown that treatment with rituximab (RTM) is associated with higher COVID-19 morbidity and mortality. Information about the course of COVID-19 in patients (pts) with Sjogren's syndrome (SjS) is still lacking.
Objectives: To compare clinical course of COVID-19 in pts with SjS treated with anti-CD20 monoclonal antibody (RTM) and treated with synthetic disease-modifying antirheumatic drugs and low doses of glucocorticoids.
Methods: Single center observational study. Pts with SjS were screened for SARS-CoV-2 infection anamnesis via telephone interview. Diagnosis of SjS was based on ECR/EULAR 2016 criteria. COVID-19 diagnosis was based on positive PCR test and typical clinical features (CT signs, fever and anosmia). RTM was administered as two infusions of 1000 mg each 2 weeks apart, and then 500 mg every 6 months.
Results: 387 pts with SjS were interviewed, 142 of them with confirmed SARS-CoV-2 were included in the study and divided into 2 groups. The first group (gr) consisted of 86 pts (79 women and 7 men) receiving RTM (gr R), median age was 56 years (33-66,5 years), and median rituximab treatment duration was 36 months (12-42 months). Pts in the control gr (gr C), 56 pts did not receive RTM (55 women and 1 man), their median age was 50 years (35-69 years). Median time from last RTM administration to COVID-19 symptoms onset was 4 months (2-6 months). Ten pts had concomitant RA, 4 pts - SLE, 5 pts - Systemic sclerosis. Fifteen pts had MALT-lymphoma anamnesis. Additionally, 15 pts (10.5%) had pulmonary involvement secondary to rheumatic disease. In total 37 pts had chronic ischemic heart disease and/or severe arterial hypertension, diabetes mellitus type 2.
In gr R 31 pts (36%), and in gr C 13 (23%) required hospitalization due to marked shortness of breath and long febrile period (p=0,1). Anti-IL6 treatment or/and Jak inhibitors were prescribed to 17 of 31 pts (54.8%) in gr R and to 5 of 13 (38%) in gr C (p=0,1). The risk of hospitalization was slightly higher in pts with comorbidity (p=0.06) and with a history of lymphoma (p=0.056) and didn't correlate with the following parameters: age, the duration of RTM therapy, lung damage. A high rate of hospitalization correlated with a shorter period between the administration of the RTM and the development of COVID-19 (R=0,387, Spearman`s Rank Correlation). Anti-SARS-CoV-2 IgG were measured in 66 pts, 47 (71%) of them were positive. Positive Anti-SARS-CoV-2 IgG were significantly more often detected in gr C (84% vs. 57,6%). No correlation was found between the formation of antibodies and the duration of RTM therapy or the time from the last RTM administration.
Conclusion: According to our data anti-CD20 therapy doesn't predispose SjS pts to severe course of COVID-19. Lymphoma anamnesis, cardiovascular diseases and diabetes have greater impact on COVID-19 severity. Obviously, anti-CD20 therapy negatively affected the formation of specific anti-SARS-CoV-2 humoral immunity.
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POS1270 COVID19 VACCINATION IN PATIENTS WITH AXIAL AND PERIPHERAL SPONDYLOARTHRITIS AND PSORIATIC ARTHRITIS: ADVERSE EVENTS AND IMPACT ON DISEASE ACTIVITY

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Background: There is scarce evidence on the rate of adverse events and the consequences on disease activity after vaccination against covid19
Objectives: To evaluate adverse events to vaccination and disease flares after vaccination in patients with axial spondyloarthritis (axSpA), peripheral spondyloarthritis (pSpA) and psoriatic arthritis (PsA) and to evaluate factors associated with adverse event.
Methods: Cross-sectional, observational, descriptive study. Consecutive patients with diagnosis of ankylosing spondylitis (AS) and non-radiographic axial spondyloarthritis (nr-axSpA) according to ASAS 2009 criteria; pSpA according to ASAS 2011 criteria and PsA according to CASPAR criteria were included. Demographic data, disease clinimetry, treatments, vaccination received and post-vaccination adverse events were recorded. We evaluated, according to medical criteria, whether the patient presented a flare disease after vaccination and whether it was mild, moderate or severe. We also evaluated the factors associated with the presence of at least one mild adverse event to vaccination as the dependent variable.
Results: 210 patients were included with a mean age of 45 (SD 15) years. The diagnoses were: AS 50 (23.8%), nr-axSpA 10 (4.8), pSpA 9 (4.3%), PsA 141 (67%) and time of disease evolution in months 109 (SD 96). Regarding comorbidities, the following frequencies were reported: arterial hypertension 60 (30%), diabetes mellitus 25 (12%), heart failure 4 (2%), asthma/EPOC 15 (7%), inflammatory bowel disease 2 (1%), acute anterior uveitis 20 (9.5%), psoriasis 128 (61%). Sixteen percent (n=33) of the patients had SARS-CoV-2 infection prior to vaccination. Regarding treatments, those used were: antiTNF 88 (42%), Tofacitinib 6 (2.9%), Ustekinumab 2 (1%), Secukinumab 35 (17%), Ixekizumab 2 (1%), methotrexate 98 (47%), leflunomide 7 (3. 3), sulfasalazine 7 (3.3), apremilast 1 (0.5%), continuous NSAIDs 26 (12.4%) and NSAIDs on demand 103 (49%). Vaccines received were: Sputnik V 109 (51.9%), Oxford Vaccine, AstraZeneca 63 (30%), Janssen 1 (0.5%), BioNTech Vaccine, Pfizer 1 (0.5%), Sinopharm 33 (15.7%), Moderna 0%, Novavax 0% and others; 3 (1.4%). Thirty-eight percent (n=80) of patients reported having mild post-vaccination symptoms, of which 3.75% did not resolve, 41% resolved with medication and 39% resolved ad integrum without medication. The presence of mild adverse event to the vaccine was associated with lower use of methotrexate (31% vs 56 %, p<0.001), and lower age (54 (SD 14) vs 47 (SD 12), p<0.001), and lower BMI (25 (24-30.5) vs 28 (25-31), p<0.001); while no association was found with sex, diagnosis, comorbidities, treatments, desease activity or vaccines. In the logistic regression analysis all the variables remained independently associated with a lower probability of presenting a mild adverse event: methotrexate: OR: 0.30, 95%CI 0.15-0.58, p<0.001, age: OR: 0.97, 95%CI 0.95-0.99, p: 0.03, BMI: OR: 0.92, 95%CI 0.95-0.99, p: 0.02. Sixty-one percent (n=129) of patients received the 2nd dose of vaccination, which 27% (n=35) presented mild adverse event and only 1 (0.8%) patient suffered post vaccination disease flare.
Conclusion: Vaccination against COVID19 appears to be safe in this population, with only mild adverse events and low frequency of flare disease. Mild adverse events were associated with less use of methotrexate, younger age and lower BMI.
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POS1271 THE COURSE AND OUTCOMES OF COVID-19 IN PATIENTS WITH TAKAYASU ARTERITIS: CASE SERIES OF 15 PATIENTS FROM A TERTIARY SINGLE CENTER

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Background: The Coronavirus disease 2019 (COVID-19) has affected more than two hundred million individuals and many risk factors for increased mortality and morbidity in COVID-19 have defined. There are many studies evaluating the effect of immunosuppressants used in inflammatory rheumatic diseases in the course of COVID-19. (1,2) However, fewer data are available on the course of COVID-19 in patients with Takayasu arteritis (TAK).
Objectives: In this study, we aimed to evaluate the characteristics and outcomes of TAK patients with COVID-19.
Methods: A phone survey was conducted among TAK patients that are followed up in our clinic between February 2021 and March 2021. All patients were asked whether they were diagnosed as COVID-19 during the pandemic. The patients who had a history of confirmed COVID-19 were asked about the symptoms, hospitalization status and the treatment received for COVID-19. Information about their chronic diseases were obtained from the patient files.
Results: Among 118 TAK patients, 15 had COVID-19 infection during the first year of pandemic, 13 of them were female and mean age was 42,5 ± 12,0 years. None of the patients had been vaccinated before the diagnosis of COVID-19. Nine of the patients were taking prednisone therapy and 3 of them were taking moderate to high doses of glucocorticoids during the infection period. Twelve patients were taking conventionally synthetic disease-modifying antirheumatic drugs (csDMARDs), 7 patients were taking biological disease-modifying antirheumatic drugs (bDMARDs), and 5 patients were taking a combination of csDMARD and bDMARD therapy when they were diagnosed with COVID-19. Two patients were hospitalized; one of them required nasal oxygen support and discharged after 5 days. The other patient was 61 years old and had multipl comorbidities and had admitted to intensive care unit for 5 days. One patient who had a mild COVID-19 disease had pulmonary thromboembolism 2 weeks after the infection and his symptoms resolved after starting anticoagulation therapy. All of the patients fully recovered and had no mortality related to COVID-19.

Conclusion: To our knowledge, this is the largest cohort reporting the course of COVID-19 in TAK patients. Our data suggest that there is no increased risk for morbidity or mortality related to COVID-19 in TAK patients.

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POS1272 EVALUATION OF DIAGNOSIS, TREATMENT AND OUTCOME RESULTS OF MIS-C PATIENTS

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Background: SARS-COV-2 infection, which has become a pandemic worldwide, has led to various results, from mild clinical findings to severe respiratory failure. Multisystem inflammatory syndrome (MIS-C) in children is a rare but severe condition characterized by fever, inflammation, and multi-organ failure, caused by an overreaction of the immune system after SARS-CoV-2 infection.

Objectives: This study aims to report the clinical and laboratory findings, diagnostic methods, treatment regimens, and short-term follow-up results of patients diagnosed with MIS-C.

Methods: This is a retrospective observational study from a tertiary pediatric rheumatology center including patients (aged 1 month to 21 years) diagnosed with MIS-C between April 2020-December 2021. Demographic, clinical, laboratory results, and follow-up data were collected through the electronic patient record system and analyzed.

Results: Of the 110 patients included in the study, 67.2% (n=74) were male. Fever was a common finding in all. Macrophage activation syndrome (MAS) was dominant in 28.2% (n=31), while Kawasaki-like disease was observed in 40% of the patients. Gastrointestinal symptoms were found in 64.5% of the cases, rash in 40%, conjunctivitis in 35.5%, lymphadenopathy in 30%, hypotension in 27.3%, cardiac decompensation in 16.4%, bradycardia in 8.2%, neurological findings in 4.5%, and/or coronary artery pathology in 3.6% respectively. Included in the study, 63.6% had lymphopenia, 48.2% had hypoalbuminemia, and 39.1% had hyponatremia. Thirty-eight patients (34.5%) were followed up in the intensive care unit; 19 of them had MAS. Concomitant chronic disease was present in 21.8% of the patients. The mean hospital stay was 12±7.8 days. Hypotension and MAS were the most common indications for admission to the intensive care unit. Intravenous immunoglobulin treatment was applied to 87.2% of the cases, the steroid was given to 70.9%, and anakinra treatment was given to 27.3%, respectively. In the outpatient follow-up, it was determined that the coronary abnormalities had regressed entirely. While 97.3% of the cases recovered without sequelae, three died. Three patients who died had the comorbid disease. While there was no significant difference in terms of Kawasaki-like disease and gender in those followed up in the intensive care unit (p=0.25, p=0.81), D-dimer was higher, and the mean age was greater (p=0.08, p=0.02). No statistical correlation was found between those with Kawasaki-like disease regarding age and gender (p=0.058 p=0.068).

Conclusion: Multisystem inflammatory syndrome in children may lead to severe cardiac findings and intensive care requirements at admission and hospital follow-up. The majority of MIS-C-related findings resolve completely until discharge or in short-term follow-up. Although the pathogenesis and treatment plan of the disease has been largely clarified, follow-up studies are needed in terms of long-term prognosis and relapse probabilities.

Disclosure of Interests: None declared

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POS1273 EVALUATION OF THE SAFETY PROFILE OF COVID-19 VACCINES IN CHILD PATIENTS USING BIOLOGICAL THERAPY

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Background: Coronavirus vaccines have been widely applied all over the world after the coronavirus pandemic. There are inactivated vaccines and mRNA vaccines in our country. There is no clear guideline for the vaccination programs of patients receiving immunosuppressive therapy, especially childhood.

Objectives: For this reason, we wanted to evaluate the frequency of side effects developed after covid-19 vaccine in pediatric patients diagnosed with rheumatic disease using biological therapy and nonbiologic disease modifiying drugs

Methods: A total of 226 patients over the age of 12, who were followed up in the pediatric rheumatology clinic of the University of Health Sciences, Umraniye Training and Research Hospital, using biological therapy and were vaccinated against Covid-19, were included in the study. The standard questionnaire forms were filled in face-to-face after each administration for both vaccines. The patient, who had any serious side effects, was followed up in the hospital.

Results: Of the 226 patients included in the study, 97 were male and 128 were female. Their mean age was 16.4+2.4. It was determined that 88.4% (n=200) of the patients had mRNA vaccine and 11.6% (n=26) had inactivated vaccine. 105 of the patients were using biologic drugs during vaccination. Of these, 63 (27.9%) patients were treated with anti-TNF drugs (46 adalimumab, 10 etanercept, 6 infliximab), 32 patients were anti-il-1 (30 canakinumab, 2 anakirna), 4 patients were anti-il-6, 3 patients were anti-il-17, 3 patient was receiving abatacept and 1 patient was receiving rituximab. 121 patients were using DMARDs. Of these, 61 were using colchicine. 26.5% (n=60) of the patients had covid infection before vaccination. Side effects were observed in 180 of our patients. No side effects were observed in 46 patients. Pain at the injection site was the most common among them, 72.6% (n=164). Headache was seen in 16.8% (n=38) of the patients, myalgia in 18.1% (n=41), fever in 16.4% (n=37) and arthralgia in 6.6% (n=15). The frequency of serious adverse events was determined as 0.9%(n=2). Both patients were followed up in the ward. When the patients were compared in terms of covid infection and gender, there was no significant difference in the frequency of side effects. When the vaccines were compared, the incidence of side effects in the mRNA vaccine was statistically significantly higher (p=0.001). Pain at the injection site was significantly less frequent in the inactivated vaccine (p=0.004). In terms of drug distribution, there was no significant difference in the frequency of side effects between patients using biologic drugs and DMARDs. p=0.004) There was no statistically significant difference in the frequency of side effects when the patients using dmard were compared as colcicine and other dmards.

Conclusion: In our study, we have shown that the use of vaccines in individuals with adolescent rheumatological diseases is safe and that the biological treatments used by the patients do not cause an increase in the risk of vaccine side effects. In addition; We have shown in our study that the side-effect profile of the inactivated vaccine used in our country is milder than the mRNA vaccine, and that it affects daily life less. Another result of our study was that anti-TNF drugs could cause a decrease in pain sensation due to the relationship of anti-TNF with pain pathways.

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POS1274 A SINGLE CENTER COVID-19 VACCINE EXPERIENCE IN FAMILIAL MEDITERRANEAN FEVER PATIENTS

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Background: To prevent COVID-19 disease SARS-CoV 2 vaccines put into use worldwide with emergency use authorizations despite ongoing safety concerns. Since pyrin mediated inflammasome response is dysregulated in FMF, exposure to SARS-CoV 2 proteins via vaccination may potentially trigger inflammation, leading to attacks and/or increased rate of adverse events (AE).

Objectives: Aim of this study to investigate frequency of adverse events and attacks related to vaccination in recipients of CoronaVac and BNT162b2 comparatively in our FMF patients.

Methods: Data regarding, number of vaccine doses, types of vaccines (CoronaVac or BNT162b2), presence of AEs and/or FMF attacks after any vaccine dose within a month, history of COVID-19 infection before or after vaccination, adherence to FMF treatment during vaccination were collected from hospital database or via telephone.

Results: A total of 161 vaccinated FMF patients were included. Mean ± SD age was 40.5 ± 11.7 years. 57.1% was female. 10.6% of the patients had chronic kidney disease and 9.3% had amyloidosis. Most common MEFV mutations were M694V heterozygous (27%) and M694V homozygous (21.6%). 93.2% of the patients were under colchicine, 21.8% under anti-interleukin 1 agents, 2.5% under TNF-a inhibitors. 96.3% of the patients adhered to FMF treatment during vaccination. Vaccination properties and data regarding adverse events are presented in Table 1. 57.8% of patients reported to suffer from an AE/attack after a vaccine dose. Number of patients with AE after BNT162b2 was significantly higher (p<0.001). None of the patients had severe AEs. 39 patients had COVID-19 infection prior to primary vaccination. 61.5% of these suffered from an adverse reaction/attack after vaccination, in comparison to 56.6% of the patients without