gender, and absence of fibromyalgia. This temporary approach has been a feasible compensation for face-to-face visits, thus reassuring for future months before the end of pandemic.

Disclosure of Interests: Francesca Ingegneri: None declared, Gilberto Cincinelli: None declared, Angela Flavia Luppino: None declared, Ennio Favalli Speakers bureau: AbbVie, Sanofi-Genzyme, Lilly, UCB, Pfizer, Novartis, Janssen, Paid instructor for: Roche, MSD, Consultant of: Lilly, Galapagos, Roberto Caporali Speakers bureau: AbbVie, Amgen, BMS, Celltrion, Galapagos, Gilead, Lilly, Pfizer, Roche, UCB, Sanofi, Fresenius Kabi, Samsung bioepis, MSD, Consultant of: Galapagos, Gilead, Lilly, Janssen, MSD.

DOI: 10.1136/annrheumdis-2021-eular.1104

POS1179 POST COVID ARTHRITIS; REACTIVE ARTHRITIS OR RHEUMATIC DISEASE FLARE OR BOTH

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Background: Reactive arthritis (ReA) is an emerging arthritis after viral infection especially respiratory and gastrointestinal related viruses. In 2020, SARS-CoV2 virus is sweeping worldwide with diverse symptoms and prolonged post-Covid manifestations in which are arthralgia and myalgia are frequently present for days and even months. Interestingly, arthritis in covid era is a part of ReA or a flare of autoimmune disease, it is challenging.⁽¹⁾

Objectives: Our objective was to determine the frequency of musculoskeletal symptoms with SARS-CoV2 virus and after recovery as well as its relation to autoimmune diseases flares.

Methods: A Prospective study was done on 241 patients who admitted to the Rheumatology clinic from March 2020 to January 2021, complaining from new onset of musculoskeletal symptoms. Detailed history, Examination of systems including Musculoskeletal, laboratory investigation, past history of existing rheumatic disease, and history of infection with covid 19.

Results: Among 241 patients with median age 34.4, 36.92% had an existing Rheumatic disease while 63.08% are not. Moreover, 39% of patients had a post history with covid 19 within weeks. The most frequent Musculoskeletal symptoms are myalgia (74.56%), arthralgia (69.36%), and arthritis (10.78%). Furthermore, ReA (Post covid arthritis) accounted (2.07%) especially monoarthritis of Ankle (68.75%) while rheumatic diseases flares (24.48%) as well as new onset rheumatic diseases (39.68%). ($p \leq 0.001$) patients of ReA improved on NSAID and intrarticular injection of glucocorticosteroid.

Conclusion: Covid 19 is one of environmental triggers for development of rheumatic disease as well as reactive arthritis post viral infections. ReA is commonly affected the Ankle joint mainly monoarthritis and had improved on oral NSAID and intrarticular injection of Glucocorticosteroid.

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Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1148

POS1180 TREATMENT COMPLIANCE OF PATIENTS WITH RHEUMATOID ARTHRITIS DURING THE FIRST WAVE OF THE SARS-CoV-2/COVID-19 PANDEMIC IN PORTUGAL: RESULTS FROM THE COVID IN RA (COVIDRA) SURVEY

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Background: The outcomes of the infection by the SARS-CoV-2 in patients with immune-mediated inflammatory diseases were largely unknown during the early days of the COVID-19 pandemic. It was hypothesized that these patients were at higher risk of morbidity and mortality due to their inherent immune dysfunction and immunosuppressive therapy. Several rheumatology societies issued recommendations urging patients not to stop their anti-rheumatic treatments.

Objectives: To assess treatment compliance of patients with rheumatoid arthritis (RA) during the first wave of the SARS-CoV-2/COVID-19 pandemic in Portugal.

Methods: The web-based survey COVIDRA (COVID in RA) was developed to assess the impact of the first wave mandatory confinement in patients with RA focusing on 5 domains: RA symptoms, attitudes towards medication, employment status, physical exercise and mental health. The questionnaire was sent to RA patients through e-mail and social media of the Portuguese Society of Rheumatology and two patient associations; and it was filled locally at two rheumatology centers in Lisbon. Recruitment took place during June and July 2020. Descriptive statistics were generated by the survey software and were afterwards transported and evaluated using appropriate biostatistics software.

Results: We obtained 441 valid questionnaires. Most respondents were female (88.4%), caucasian (93.6%), with a mean age of 58 (+/-13) years. The majority (57.6%) had longstanding disease (>10 years) and were treated with csDMARDs (63.2%) and/or bDMARDs/tsDMARDs (23.7%). Only 14% (N=61) discontinued or reduced the dosage or frequency of their RA treatment. Most of these changes were previously planned by the attending physician (27.9%). Only 11 patients (18%) discontinued their immunosuppressive medication out of fear of becoming infected with SARS-CoV-2 (corresponding to 2.5% of total responders). Another 11 patients did so because they had no prescription, couldn't go to the community/hospital pharmacy or couldn't afford the medication. Although these numbers preclude any statistical analysis, when compared to patients who persisted on their treatment, those discontinuing due to fear of contagion were younger (56.4 vs 58.5 years), all female (100 vs 86.8%), with long-lasting disease (≥ 11 years) (90.9% vs 57.5%), more frequently treated with bDMARDs (36.4 vs 23.1%) and presenting more symptoms of depression (54.5 vs 49.7%).

Conclusion: Most RA patients complied with their treatment during the first wave of the SARS-CoV-2 pandemic in Portugal. Only a minority changed their immunosuppressive treatment due to fear of SARS-CoV-2 infection. Very similar rates of immunosuppressive discontinuation due to fear of contagion were reported by other authors (such as Schmeiser *et al*, Pineda-sic *et al* and Fragoulis *et al*).

Disclosure of Interests: Filipe Araujo Speakers bureau: Pfizer, Biogen, Novartis, Menarini, Consultant of: MSD, Nuno Gonçalves: None declared, Ana Filipa Mourão: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1152

POS1181 CLINICAL COURSE OF COVID-19 IN CHILDREN WITH RHEUMATIC DISEASE UNDER BIOLOGIC THERAPY

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Background: Since the beginning of the COVID-19 pandemic in our country, Turkey, more than two million people have been infected and more than 20,000 people have died. Although children infected less frequently and generally have a milder findings of COVID-19, the number of patients with a more severe clinical course as multisystem inflammatory syndrome in children (MIS-C) is increasing significantly. However, it has not been shown exactly how biological disease-modifying antirheumatic drug (bDMARD)s, which we frequently use in our pediatric rheumatology practice, and/or the underlying rheumatological diseases affect the clinical course of COVID-19.

Objectives: Here, we aimed to reveal the outcome of COVID-19 infection in our patients with pediatric rheumatic disease and treated with bDMARDs.

Methods: During the period between April 1, 2020 and December 1, 2020, the patients who received bDMARDs were evaluated at the regular outpatient clinic follow-up or by telemedicine with a maximum of 3 months interval. Clinical and demographic characteristics, COVID-19 data and outcome of these patients were retrospectively collected.

Results: Out of the 436 patients treated with bDMARDs, 39 children were infected with COVID-19. The diagnosis was confirmed in 37 patients by RT-PCR (nasopharyngeal swab) and in two by antibody test. Twenty-two (56.4%) patients were female (17 male, %43.6) and the median age of patients were 12.3 years (min-max: 1.2-20.9). The primary diagnosis of patients were as follows: 20 juvenile idiopathic arthritis (six were systemic subtype), 12 systemic autoinflammatory diseases, three vasculitis, three chronic recurrent multifocal osteomyelitis and one Sjögren's syndrome. Prior to COVID-19 infection, 13 patients (33.3%) were using canakinumab, seven were infliximab (18%), five were adalimumab (12.8%), four were etanercept 10.2%, four were tocilizumab (10.2%), three were anakinra (7.7%), two were rituximab (5.1%), and one was tofacitinib (2.6%).

Of the 39 patients, 21 had at least one COVID-19-related symptom, while 18 patients were asymptomatic. No laboratory or imaging tests was performed for asymptomatic patients and they were followed up without treatment at home isolation. Laboratory tests revealed that fourteen patients had elevated acute phase reactants, six had elevated D-dimer levels, three had lymphopenia ($<1000/\text{mm}^3$), and three had hyperferritinemia.

Hospitalization was required in 20 patients (51.3%) at median of 7-days (min-max: 3-17) and pediatric intensive care unit admission in one. Five patients developed MIS-C and one of these patients was followed up in the pediatric intensive care unit. Myocardial dysfunction was developed in this patient and he was died. The other four patients fully recovered with no remain morbidity.

Conclusion: Considering the literature data and the results of our study, it is not possible to say that currently used bDMARDs worse the course of COVID-19 infection. In patients with underlying risk factors for hyperinflammation, as in one of our patients, COVID-19 may cause mortality regardless of the use of bDMARDs. Whether bDMARDs does not affect the severity of the disease, but it is still not true to say that these drugs are protective. Since cessation of

bDMARDs for COVID-risk may cause exacerbation of the primary rheumatic disease, continuing with current treatments seems an appropriate approach.

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Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1173

POS1182

MANAGEMENT OF DIFFICULT-TO-TREAT RHEUMATOID ARTHRITIS DURING THE COVID-19 PANDEMIC: EVIDENCE FROM THE ITALIAN EPICENTER

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Background: Despite significant improvement in the RA management, up to twenty percent of patients with rheumatoid arthritis (RA) have a difficult-to-treat (D2T) disease. The COVID-19 related mitigation policies, for instance quarantine, and consequent difficult access to in-person visits, laboratory and imaging investigations, adversely affected the follow up of rheumatic patients. Although pandemic-imposed limitations could have negatively influenced disease management particularly in D2T patients, to what degree these restrictions affected the treat-to-target (T2T) and tight-control strategy in this subgroup of RA patients has not been investigated yet.

Objectives: To evaluate whether the switch to telehealth imposed by COVID-19 pandemic was effective in the management of D2T RA patients treated with targeted therapies.

Methods: This observational retrospective real-life study was conducted from November 2019 through September 2020. Among RA patients treated with targeted therapies, RA D2T patients according to EULAR definition (1) were identified. Clinical Disease Activity Index (CDAI) of these patients was analysed retrospectively before, during and after lockdown (LD). During LD period, patients could choose whether to receive home drug delivery or to maintain their face-to-face consultations, and in the former rheumatologists provided virtual care. To evaluate the effect of LD on the percentage of patients in remission, logistic mixed effects regression models were fitted, with CDAI remission as response variable.

Results: Data were extracted from a longitudinal observational registry, and at baseline, 52 patients treated with targeted therapies were classified as D2T RA. Among them, during pre-LD, LD, and post-LD 11.54% (N=6), 53.49% (N=23), and 46.15% (N=24) had CDAI remission/low disease activity, while 46 (88.46%), 20 (46.51%) and 28 (53.85%) had CDAI moderate/high. All the patients completed the follow-up. Median values of CDAI during pre-LD, LD, and post-LD were 14.5 [IQR 12-21], 9 [IQR 5.5-16], and 11 [IQR 6-19.2] respectively (see Figure 1 below).

Conclusion: Telephone-based tight control strategy ensured satisfactory management of D2T RA treated with targeted therapies. This temporary approach has been a feasible compensation for the decline of face-to-face visits also in this challenging group of RA patients, thus reassuring for future months before the end of pandemic.

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Disclosure of Interests: Francesca Ingegnoli: None declared, Angela Flavia Luppino: None declared, Gilberto Cincinelli: None declared, Ennio Favalli Speakers bureau: AbbVie, Sanofi-Genzyme, Lilly, UCB, Pfizer, Novartis, Janssen, Paid instructor for: Roche, MSD, Consultant of: Lilly, Galapagos, Roberto Caporali Speakers bureau: AbbVie, Amgen, BMS, Celtrion, Galapagos, Gilead, Lilly, Pfizer, Roche, UCB, Sanofi, Fresenius Kabi, Samsung bioepis, MSD, Consultant of: Galapagos, Gilead, Lilly, Janssen, MSD.

DOI: 10.1136/annrheumdis-2021-eular.1188

POS1183

OUTCOMES OF COVID-19 INFECTION AMONG CHILDREN AND YOUNG PEOPLE WITH PRE-EXISTING RHEUMATIC AND MUSCULOSKELETAL DISEASES

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Background: It remains unknown whether children and young people with rheumatic and musculoskeletal diseases (RMD) who acquire COVID-19 infection have a more severe COVID-19 course, due to either underlying disease or immunosuppressive treatments.

Objectives: To describe outcomes among children and young people with underlying RMD who acquire COVID-19 infection.

Methods: All children and young people <18 years of age with COVID-19 (pre-symptomatic or confirmed) reported to the EULAR COVID-19 Database, which collects details regarding RMD diagnosis and treatment, COVID infection and outcomes, between 27 March 2020 and 29 January 2021 (cutoff date for this analysis) were included. Patient characteristics and COVID-19 outcomes are presented.