anxiety and depression symptoms and does not correlate with inflammation and thrombotic biomarkers.

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AB1144 COGNITIVE AND PSYCHOSOCIAL OUTCOME IN CHILDREN WITH MULTISYSTEM INFLAMMATORY SYNDROME FOLLOWING SARS-COV-2 INFECTION

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Background: Despite the low rate of neurological deficits following the SARS-COV-2 infection in the pediatric population, children and adolescents who develop multisystem inflammatory syndrome (MIS-C) after being infected with SARS-COV-2 are at a higher risk for neurological abnormalities and brain injury, increasing the risk of adverse cognitive and psychiatric outcome.

Objectives: Given the increased risk of central nervous system impairment we chose to conduct a prospective study looking at the cognitive and psychosocial outcome of patients with MIS-C.

Methods: Our study included 27 of the 29 patients between 2 to 18 years of age (M = 11.1, SD = 4.4) who were treated for MIS-C from the onset of the SARS-COV-2 pandemic until the beginning of May 2021 at the only tertiary care pediatric immunology center in Slovenia. We assessed these patients 6 months after diagnosis using the age-appropriate Wechsler intelligence scales and a battery of neuropsychological test measuring attention, executive function, memory and fine motor skills. We also asked parents to report on patients' psychosocial outcome using the Achenbach Child Behavior Checklist.

Results: By using Bayesian statistics to take into account parental education and any potential pre-morbid learning difficulties we found no evidence of impairment on measures of intelligence. However, the posterior distribution of scores on neuropsychological measures indicated that a significant proportion of patients scored 1SD bellow expected levels on measures of attention (31%), executive function (28%) and visual memory (35%). Increased symptoms of depression, anxiety and attention difficulties were also reported by parents, although their extent did not rise to a clinically significant level.

Conclusion: The findings from our cohort suggest that the cognitive and psychosocial outcome of patients with MIS-C is generally favorable, although up to 35% may experience specific neuropsychological deficits more than 6 months after diagnosis. The most commonly impaired cognitive domains seem to be attention, executive function and visual memory.

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AB1145 EVALUATION OF THE HUMORAL IMMUNE RESPONSE SECONDARY TO VACCINATION AGAINST SARS-COV2 IN PATIENTS WITH AUTOIMMUNE RHEUMATIC DISEASES

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Background: Several trials have reported lower seroconversion rates in patients with autoimmune rheumatic diseases than in healthy patients. In Argentina, the vaccines that were available during the development of this study were: Sputnik V (Gam-COVID-Vac), AstraZeneca (ChAdOx1 nCov-19), Sinopharm (BBIBP-CorV) and Moderna (mRNA-1273). Limited information is available about vaccines against SARS-CoV2 with inactivated virus or viral vector in autoimmune patients.

Objectives: To evaluate the humoral immune response to vaccines against SARS-CoV2 in patients with autoimmune rheumatic diseases; to compare the humoral response among patients with Systemic Lupus Erythematosus (SLE) and other autoimmune diseases and to analyse the variables associated.

Methods: We included patients with autoimmune rheumatic diseases (Rheumatology Unit of Padilla Hospital, Tucumán, Argentina), who received vaccination against SARS-CoV2 from June 2021. Sociodemographic, comorbidities, related to rheumatic disease, vaccination and SARS-CoV2 infection were the variables recorded. To evaluate the humoral immune response, the neutralizing anti-S-RBD IgG antibody titres were determined by ELISA "In House" test with a cut-off titre of 200 (IMMCA). The times established for the serological determinations were: T0 or baseline: 1st vaccine dose, T1: 14 ± 2 days after the 1st dose, T2: 2nd dose, T3: 21- 45 days after the 2nd dose, T4: 30 days after the 3rd dose, T5: 6 months and T6: 12 months after the 3rd dose.

Results: 66 patients were included, 91% women and 92.4% Amerindians. The mean age was 40.7 ± 11.4 years; 53% with SLE, 15.2% Rheumatoid Arthritis, 7.6% Systemic Sclerosis, 7.6% Juvenile Idiopathic Arthritis, 7.6% Systemic Vasculitis and 9% other diagnoses; mean disease duration was 12.05 ± 7.5 years; 63.6% had at least one comorbidity (57% HBP, 31% overweight or obesity). At baseline, the treatments received were: corticosteroids (37.9%, prednisone mean dose 4.12 ± 8 mg/day), cDMARDs (75.7%), bDMARDs (18.2%): Rituximab (58.3%) and anti TNF (25%). Sixteen patients (24.2%) had previous COVID19 (75% mild symptoms). The vaccines applied were: AstraZeneca 38.2%, Sinopharm 31.7%, Sputnik V 19%, and combined schedule Sputnik V/ Moderna in 11%. At baseline, 28.8% had detectable anti-S-RBD IgG antibodies. This frequency increased to 48.4% at 1st dose and 70.2% at 2nd dose. The variables that were associated with lower seroconversion rates and lower antibody titre were vaccination with Sinopharm (p 0.028) and treatment with bDMARDs (p 0.02), none of the 5 patients with Rituximab showed seroconversion. There were no significant differences in the levels of anti-S-RBD IgG antibodies between patients with SLE and the other rheumatic diseases. Patients who had SARS-CoV2 infection prior to vaccination had higher antibody titres in both T1 (p 0.006) and T2 (p 0.002) but after the two doses this difference was not significant (p 0.67). In the regression analysis, the variables that were independently associated with seroconversion were the type of vaccine applied at the 1st dose and the hypertensive disease. The chance of responding to vaccination was 13 and 9 times higher for those who received Sputnik V (OR 12.78; 95% CI 1.46 - 315.9) or AstraZeneca (OR 8.61; 95% CI 1.63 - 72.5) respectively, than Sinopharm in the 1st dose. The chance of being a responder was 88% lower for hypertensive patients (OR 0.12; 95% CI 0.02 - 0.58).

Conclusion: In this preliminary analysis, a seroconversion rate of 70.2% was associated with two-dose vaccination for SARS-CoV2 in patients with autoimmune rheumatic diseases. There were no differences in the serological response between patients with SLE and other rheumatic diseases. The humoral immune response was lower in patients with bDMARDs and null in those who received Rituximab. Seroconversion and antibody titres levels were associated with the type of vaccine applied, being Sinopharm who presented the lowest response. The follow-up will provide more knowledge about the behaviour of the humoral response in our patients.

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AB1146 SARS-COV-2 VIRAL LOAD IN PATIENTS WITH AUTOIMMUNE RHEUMATIC DISEASE, A RETROSPECTIVE COMPARATIVE STUDY

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Background: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) viral load and its impact on disease outcome in patients with autoimmune rheumatic disease (ARD) are lacking. Also, whether patients with ARD receiving immunomodulators have different viral loads compared to the general population is unknown.

Objectives: To compare the viral load of SARS-CoV-2 and its trending between patients without and with ARD.