

Seroconversion occurred in 53.25%. low IgG titers were present in 2.94% and IgM persisted positive in 56.25% of this group. In 6.45% the result was indeterminate.

Conclusion: Hospitalization and mortality rate obtained was low and the most frequent symptoms were mild. Seroconversion occurred in more than 50% of patients and the result of 6.45% was indeterminate. It's important to highlight that since March 2020 to May 2020 IgG positive prevalence was 25%, while since September 2021 to February 2021, this prevalence increased until 57.45%. This difference is due to a modification of autoantibody detection technique since summer 2020.

Disclosure of Interests: None declared

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AB1169

IMMUNOMODULATORY EFFECTS OF SARS-COV-2 VACCINATION: INCREASE OF REGULATORY T CELLS AFTER MRNA VACCINE

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Background: Besides the ability to induce antigen-specific responses, vaccines can be endowed with immunomodulatory properties including the capacity to induce or downregulate regulatory T cells (Treg) that suppress adaptative and autoreactive immune responses (1).

Objectives: We asked if an anti-SARS-CoV-2 mRNA vaccine could also induce an accumulation of Treg cells in patients with mixed cryoglobulinemia vasculitis (MCV), who have a deficiency of Treg cells (2) and in healthy individuals. We also investigated immunologic variables possibly associated with a low immunogenicity of SARS-CoV-2 mRNA vaccine in patients with MCV (3).

Methods: We analyzed peripheral blood lymphocyte subpopulations and anti-SARS-CoV-2 serological response in 24 patients with MCV and 9 Healthy donors (HD) before and after 2 weeks after the second dose of the Pfizer/BioNTech vaccine.

Results: Among MCV patients we found 15 serological responders and 9 non-responders. All 5 seronegative patients treated recently with rituximab had <5 B cells/ μ L, whereas the absolute B cell count was increased in 2 of 4 untreated patients due to monoclonal B cell lymphocytosis, with monoclonal cells representing more than 90% of B cells, associated with non-Hodgkin lymphoma. The percentage of pathologic CD21^{low} B cells was significantly increased in seronegative patients. Before receiving the Pfizer/BioNTech vaccine, patients with MCV had a significantly reduced frequency of Treg cells among CD4⁺ T cells compared to HD. After the second dose of the vaccine, there was in MCV patients a significant increase in the percent and absolute count of Treg among CD4⁺ T cells Concerning the pre-vaccination distribution of T cells subpopulations, including the percentages and absolute counts of total CD3⁺, CD4⁺, CD8⁺, HLA-DR⁺ activated, Treg or CD56⁺ natural killer T cells, we could not reveal any pattern significantly associated with lack of serological response to vaccine.

Conclusion: Our findings show that lack of immunoreactivity in patients with MCV may be associated with expansion of pathologic B cells and that anti-SARS-CoV2 mRNA vaccine may induce an increase of Treg cells.

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AB1170

IMPACT IN PRENATAL EVALUATION OF PREGNANT WOMEN WITH RHEUMATIC DISEASES BY THE SARS-COV2 PANDEMIC

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Background: Due to the SARS-CoV-2 pandemic, an increase in stress, anxiety, and depression has been seen, as well as greater use of substances and a decrease in prenatal care in pregnant women. (1) Women of childbearing age with autoimmune rheumatic diseases (ARDs) experience greater psychological stress, which can negatively influence behavior. (2)

Objectives: This study aims to compare changes in prenatal laboratory and ultrasound tests by trimester, as well as the detection of anxiety and depression in pregnant women with ARDs due to the SARS CoV-2 pandemic.

Methods: This study was carried out on pregnant patients with ARDs from the Pregnancy and Rheumatic Diseases clinic of the rheumatology department of the University Hospital "Dr. José Eleuterio González" during the period from February 2018 to August 2021. Two standardized evaluations of anxiety and depression were carried out using the Inventory of Trait and State Anxiety (IDARE) and the Edinburgh Postpartum Depression Scale (EPDS) respectively in the third trimester of pregnancy. Maternal report of alcohol consumption during any trimester of pregnancy, as well as adherence to routine laboratory studies such as structural ultrasound and gestational diabetes screening, was addressed. Positive COVID-19 nasopharynx PCR results were evaluated during pregnancy beginning in the pandemic period (March 2020). The pre-pandemic recruited group was compared with the pandemic group. The comparison of the groups was carried out using the Chi-Square and Fisher tests. A significant value of $p < 0.05$ was considered. Statistical analysis was performed using the IBM SPSS v.25 program.

Results: 50 pregnant patients with ARDs were recruited, of which 24 were included in the pre-pandemic group and 26 in the pandemic group. Compared with the pre-pandemic group, pregnant women recruited during the pandemic had a statistically significant higher positivity for state anxiety ($p=0.023$), likewise trait anxiety, depression, and suicidal ideation were detected more frequently, but the difference was not statistically significant, a higher rate of adherence to laboratory and cabinet studies was found, being significant for laboratories performed in the 1st and 2nd trimesters (0.005 and 0.025 respectively). See Table 1.

Table 1. Characteristics of pregnant women with autoimmune rheumatic diseases before and during the SARS-CoV-2 pandemic.

Measure	Before pandemic n=24	During pandemic Covid Negative n=22	During pandemic Covid Positive n=4	P value ^a
EPDS Positive depression detection (≥ 10)	16.7%	36.4%	50%	.197
suicidal ideation	16.7%	0%	25%	.099
IDARE Positive state anxiety detection (>45)	12.5%	27.3%	75%	.023
IDARE Positive trait anxiety detection (>45)	8.3%	13.6%	50%	.204
Any alcohol consumption during pregnancy	20.8%	4.5%	0%	.176
Structural Ultrasound – Mid-Pregnancy	66.7%	95.5%	100%	.025
Gestational diabetes screening	75%	86.4%	100%	.376
Laboratories				
First trimester	20.8%	50%	0%	0.005
Second quarter	45.8%	77.3%	100%	0.025
Third trimester	58.3%	81.8%	75%	0.216

IDARE= State and Trait Anxiety Inventory, EPDS= Edinburgh Postpartum Depression Scale. A Chi-square test for categorical variables or Fisher's exact test where the expected cell n

Conclusion: A higher frequency of positivity for state anxiety was demonstrated in pregnant women with ARDs recruited during the pandemic, as well as higher trait anxiety, depression, and suicidal ideation, although this increase was not statistically significant. On the other hand, concern about the pandemic and health status could positively influence better adherence to screening and routine studies during pregnancy.

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