Abstract N°: 1458

COVID-19 in patients with rheumatic diseases: Comparison of data from the Argentine registry (SAR-COVID), with the Latin American and Global registry (Global Rheumatology Alliance).

Alvaro Andres Reyes*[1], Gelsomina Alle[1], Romina Tanten[1], Marina Scolnik[1], Enrique Soriano[1], Guillermo Berbotto[2], Maria Haye[2], María Julieta Gamba[2], Romina Nieto[2], Mercedes García[2], Veronica Savio[2], Luciana Gonzalez Lucero[2], Paula Alba[2], Lorena Takashima[2], Fabian Risueño[2], Luciana Casalla[2], Natalia Cucchiaro[2], Ana Bertoli[2], Sabrina Porta[2], Carla Maldini[2], Rosana Gallo[2], Cecilia Goizueta[2], Eugenia Picco[2], Rosana Quintana[3], Karen Roberts[3], Carolina Ayelen Isnardi[3], Guillermo Pons-Estel[3]

[1]Hospital Italiano de Buenos Aires, Reumatologia, Buenos Aires, Argentina, *[2]On behalf of SAR-COVID Registry, On behalf of SAR-COVID Registry, Buenos Aires, Argentina*, *[3]Argentine Society of Rheumatology - Research Unit - SAR-COVID Registry, Argentine Society of Rheumatology - Research Unit - SAR-COVID Registry, Buenos Aires, Argentina*

on behalf of SAR-COVID Registry

Background:

SARS CoV-2 infection has recently burst onto the global scene, and the knowledge of the course of this infection in patients with rheumatic diseases receiving immunomodulatory treatment is still insufficient. The Argentine Society of Rheumatology (SAR) designed a national registry called SAR-COVID in order to get to assess our reality.

Objectives:

To identify the particular characteristics of patients with rheumatic diseases and COVID-19 in Argentina (SAR-COVID Registry), and to compare them with the data reported at the Latin American and Global level (Global International Alliance Rheum-COVID Registry).

Methods:

A national, multicenter, prospective and observational registry was carried out. Patients older than 18 years, with a diagnosis of rheumatic disease and SARS-CoV-2 infection by PCR or serology, were included between August 13, 2020 and January 17, 2021. Demographic data, underlying rheumatic disease (activity of the disease, current treatment), comorbidities, clinical-laboratory characteristics of the SARS-CoV-2 infection, as well as received treatments (pharmacological, oxygen therapy / ventilatory support) and outcomes (hospitalization, mortality) were recorded. The characteristics of the included patients were compared with the data reported at the Latin American and global level. Descriptive statistics were performed. Comparisons between groups were made using ANOVA, chi2 or Fisher's test, according to the type of variable.

Results:

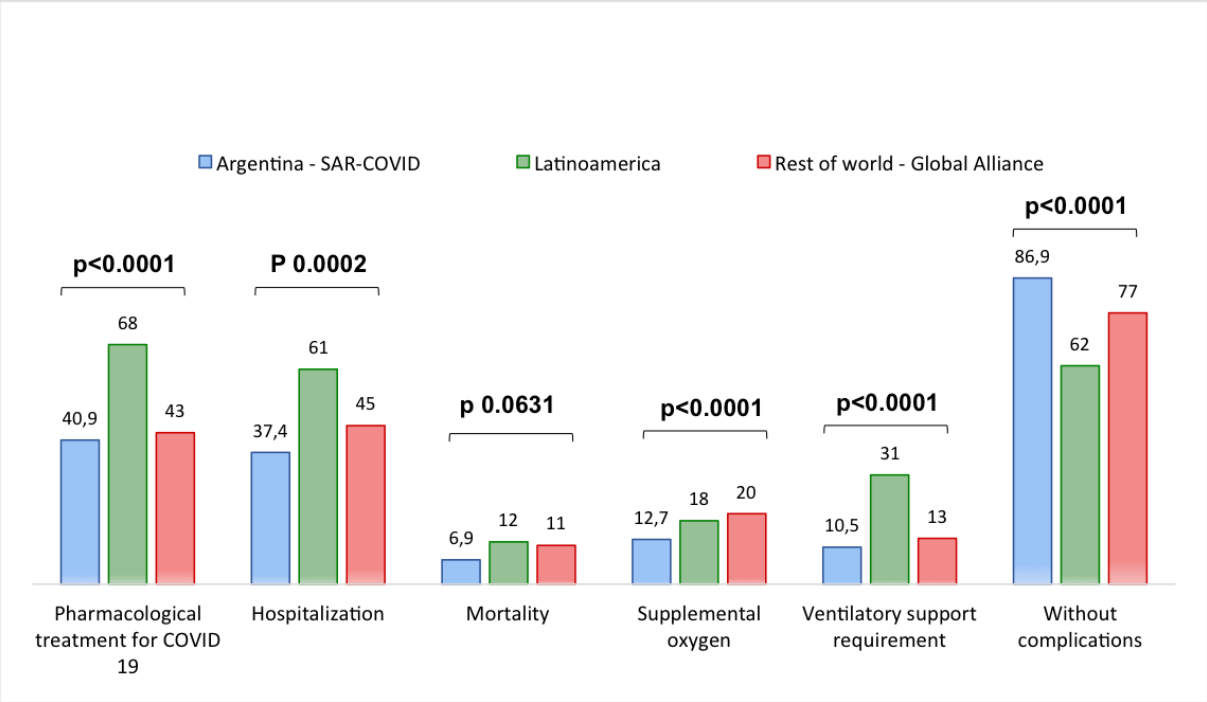
Four hundred sixty-five patients from Argentina, 74 patients from Latin America and 583 from the rest of the world were included, mostly women (79.6%, 73% and 71% respectively), with a mean age of 50.2 (SD 15.3), 53.5 (DE 15.6) and 55.8 (15.5), years respectively. The most frequent rheumatic diseases in the three groups were rheumatoid arthritis (43.9%, 35%, and 39%) and systemic lupus erythematosus (16.1%, 22%, and 14%) (Table 1).

In Argentina, fewer patients received specific pharmacological treatment for COVID-19 (40.9%, 68% and 43% respectively, p <0.0001), and there was a lower requirement of NIMV / IMV (Non-Invasive Mechanical Ventilation/Invasive Mechanical Ventilation) than in the rest of Latin America and the world (10.5% vs 31% vs 13%, p <0.0001).
Hospitalization was lower in Argentina than in the rest of Latin America (37.4% vs 61% p 0.0002) and of the world (37.4% vs 45% p 0.0123), and mortality was numerically lower in Argentina, but without statistically significant differences between the three groups (6.9%, 12% and 11%; p 0.6311). Most of the patients, (86.9%) did not present any complications in Argentina, with a statistically significant difference with the rest of the groups (62% and 77%, p <0.0001) (Graph 1).

Conclusion:

The patients with rheumatic diseases and SARS-CoV-2 infection reported in this argentinian registry received less specific pharmacological treatment for COVID-19, presented fewer complications and required less ventilatory support, than those reported in the Latinoamerican and Global registry. However, no statistically significant differences were observed in terms of mortality.

Graph 1. Main outcomes and evolution of patients with rheumatic disease and COVID-19.



References:

1. Stokes, Erin K, Zambrano, Laura D, Anderson, Kayla N, et al. *Coronavirus Disease 2019 Case Surveillance - United States, January 22-May 30, 2020.* MMWR Morb Mortal Wkly Rep; 69(24): 759-765, 2020 Jun 19.
2. Mehta P, McAuley DF, Brown M, et al. *COVID-19: consider cytokine storm syndromes and immunosuppression.* Lancet 2020;395:1033–4.
3. Gianfrancesco M, et al. *Characteristics associated with hospitalisation for COVID-19 in people with rheumatic disease: data from the COVID-19 Global Rheumatology Alliance physician-reported registry.* Ann Rheum Dis 2020;79:859–866.
4. Manuel F. Ugarte-Gil, et al. *Characteristics associated with Covid-19 in patients with Rheumatic Disease in Latin America*. Global Rheumatology. Septiembre 2020.

Acknowledgements:

Disclosure of interest: Alvaro Andres Reyes Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Gelsomina Alle Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Romina Tanten Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Marina Scolnik Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Enrique Soriano Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Guillermo Berbotto Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Maria Haye Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", María Julieta Gamba Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Romina Nieto Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Mercedes García Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Veronica Savio Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Luciana Gonzalez Lucero Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Paula Alba Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Lorena Takashima Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", FABIAN RISUEÑO Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Luciana CASALLA Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Natalia Cucchiaro Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Ana Bertoli Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Sabrina POrta Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Carla Maldini Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Rosana Gallo Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Cecilia Goizueta Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Eugenia Picco Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Rosana Quintana Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Karen Roberts Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Carolina Ayelen Isnardi Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data.", Guillermo Pons-Estel Grant/research support from: "Unrestricted grants: Pfizer, Abbvie, Elea Phoenix. None of them have access to patient data."