PANLAR 2022 - Abstract Submission

COVID-19

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Covid-19 In Patients With Rheumatic Immune-Mediated Inflammatory Diseases From América: Differences And Similarities Between México And Argentina

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Objectives To assess and compare clinical course, severity and complications of SARS-CoV-2 infection in patients with rheumatic immune-mediated inflammatory diseases (IMIDs) from Mexico and Argentina.

Methods Data from both national registries, CMR-COVID and SAR-COVID, were combined. Briefly, adult patients with rheumatic IMIDs with SARS-CoV-2 infection were recruited between 13.08.2020 and 20.02.2022 in SAR-COVID and between 17.04.2020 and 10.02.2022 in CMR-COVID. Sociodemographic data, comorbidities and DMARDs as well as clinical characteristics, complications and treatment for SARS-CoV-2 infection were recorded. Descriptive analysis. Chi square, Fisher, Student T, Mann Whitney U tests and multiple logistic regression analyses were performed.

Results A total of 3181 patients were included, 908 (28.5%) from the CMR-COVID registry and 2273 (71.5%) from the SAR-COVID registry. Most of them (81.7%) were females, with a mean age of 50.4 years (14.3).The IMIDs more frequently reported were rheumatoid arthritis (48.7%) and systemic lupus erythematosus (18.6%). Mexican patients were significantly older, had a higher female predominance and had higher prevalence of antiphospholipid syndrome and axial spondyloarthritis, while argentines had more frequently psoriatic arthritis. In both cohorts approximately 80% were in remission or low disease activity. At the time of infection, Mexicans were taking glucocorticoids (47% vs 38%, $p<0.0001$) and rituximab (5% vs 2%, $p<0.0001$) more frequently. They also reported more comorbidities (48% vs 40%, $p<0.0001$). COVID-19 symptoms were present in 95% of the patients (Fig.1). The frequency of hospitalization was comparable between groups (25.2%), however Mexicans presented more severe disease (Fig.2) and higher mortality rate (10% vs 4%, $p<0.0001$). As expected, they were more frequently treated for SARS-CoV-2 infection (60% vs 29%, $p<0.0001$), particularly with glucocorticoids (41%) and azithromycin (29%). After adjusting for risk factors, Mexicans were more likely to die due to COVID-19 (OR 2.2, 95%CI 1.5-3.1).

Image 1

Figure 1. Frequency of SARS-CoV-2 infection symptoms in patients
IMIDs from Mexico and Argentina

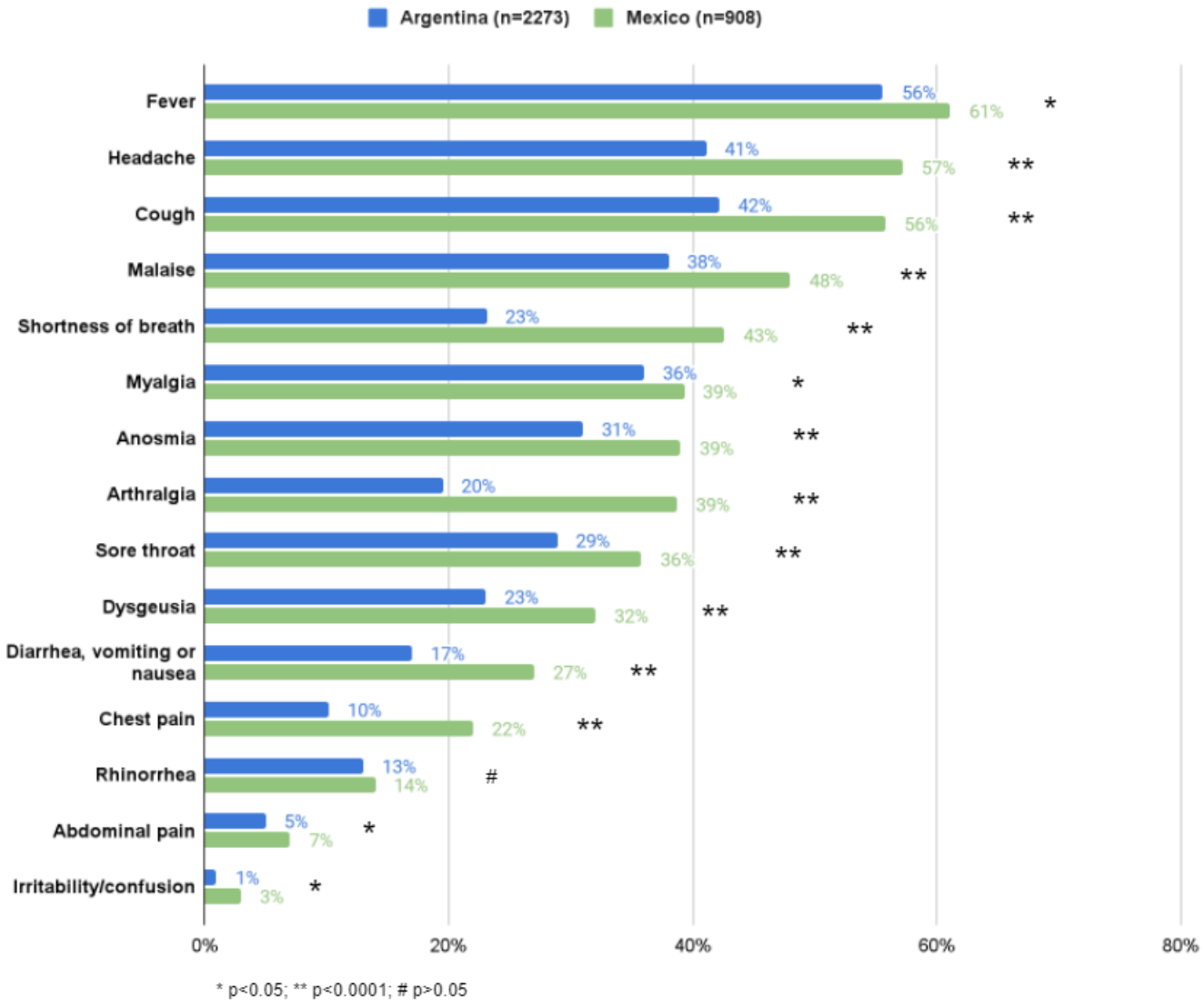
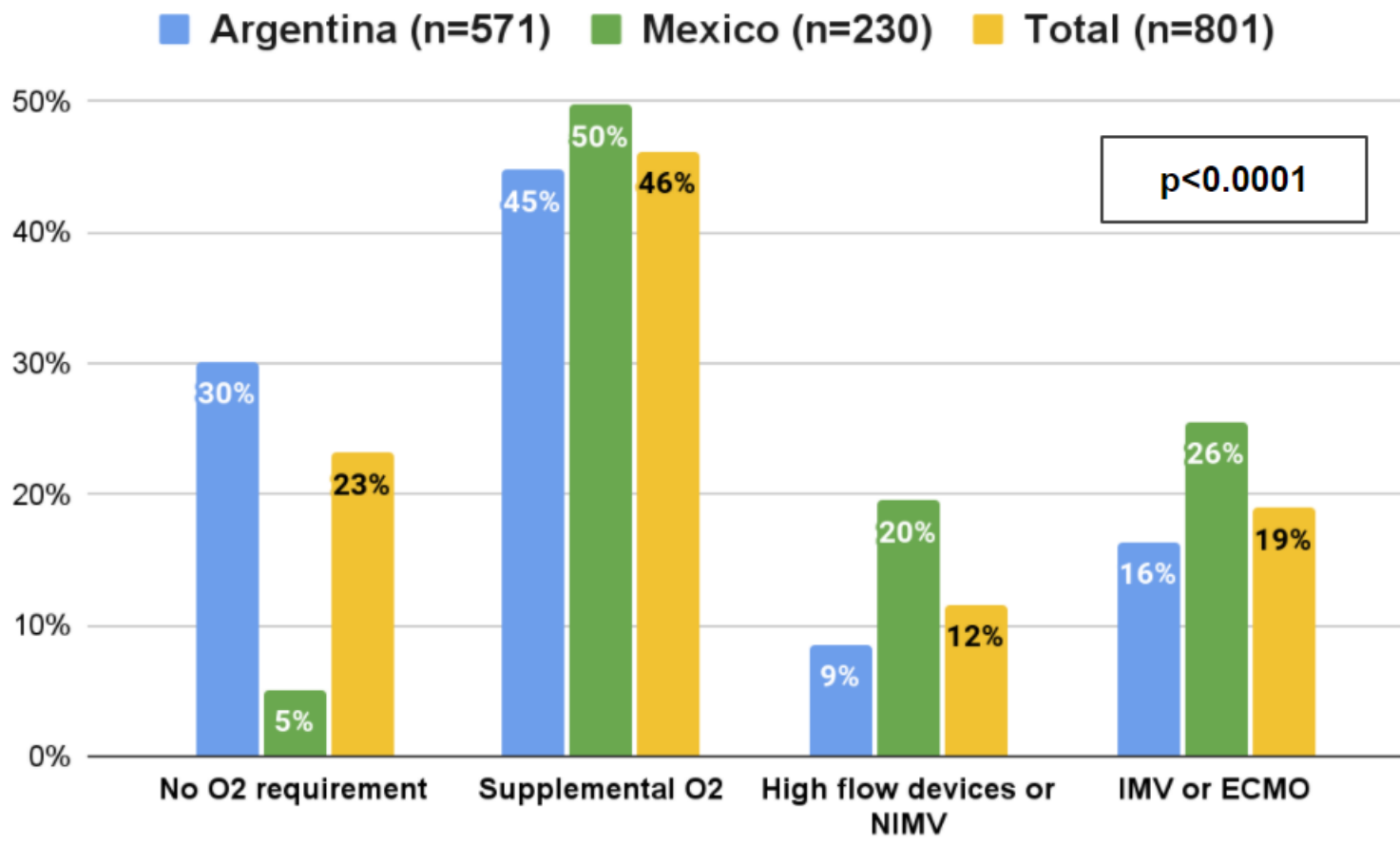


Image 2

Figure 2. Oxygen requirements among hospitalized patients



*O2: oxygen; NIMV: non invasive mechanical ventilation; IMV: invasive mechanical ventilation; ECMO: extracorporeal membrane oxygenation

Conclusion In this cohort of patients with IMIDs from Mexico and Argentina with SARS-CoV-2 infection, the majority presented symptoms, a quarter were hospitalized and 6% died due to COVID-19. Mexicans presented more severe disease, and after considering risk factors they were two times more likely to die.