Factors associated with mortality in lupus during the COVID-19 pandemic

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Dear Editor

I read with great interest the article titled "COVID-19 in patients with systemic lupus erythematosus and mortality." I believe it is appropriate to clarify some of the statements made by Alva-Arroyo et al. (1). During the SARS-CoV-2 pandemic, the Global Rheumatology Alliance registry was developed. This registry characterized patients with autoimmune diseases who had COVID-19 early on in the pandemic. As early as 2020, it was established that exposure to more than 10 mg/day of corticosteroids increased the likelihood of hospitalization (2).

Using the Global Rheumatology Alliance registry, Ugarte-Gil et al. analyzed 1,606 people with systemic lupus erythematosus and found that older age, male sex, taking corticosteroids, not currently receiving treatment, and having comorbidities (chronic kidney disease, cardiovascular disease/hypertension and high systemic lupus erythematosus [SLE] activity) were associated with more serious outcomes. Treatment with mycophenolate, rituximab and cyclophosphamide proved to have worse outcomes (3).

Baricitinib has not been shown to increase COVID-19 severity and has been proposed as an effective treatment which, together with remdesivir, has proven to reduce recovery treatment and accelerate clinical improvement in patients hospitalized for COVID-19 (4).

It is unlikely that the mortality in this case series was related to the use of baricitinib or the presence of lupus nephropathy, and therefore it is important to intensify treatment so that patients with SLE can achieve low activity/remission of the disease and control comorbidities to avoid the severe form.

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Answer

Different pharmacological treatments, including baricitinib, were generated during the pandemic with the aim of decreasing mortality. However, despite what is described in this letter to the editor, baricitinib appears to be a confounding variable. As is clearly shown in the table of general characteristics, patients who were prescribed an 8 mg dose by their rheumatologist survived, unlike those with a 4 mg dose, although it is true that it is a case series. I should point out that we did not have access to remdesivir in Mexico; therefore, the multidisciplinary consensus treatment was an 8 mg dose, and they were shown to survive, although it should be noted that the two patients who died had the vaccine and the two who survived did not. All of these patients were in catastrophic settings like the pandemic, and more patients were needed in our population to meet the calculated sample size to show statistical power in determining the dose-response relationship; however the pandemic ended and no further patients were recruited..

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