

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

FISEVIER

Contents lists available at ScienceDirect

Seminars in Arthritis and Rheumatism

journal homepage: www.elsevier.com/locate/semarthrit



Are glomerular patients treated with immunosupressed drugs more protected against sever SARS-Covid -2?



Dear Editor,

Some authors think than the SARS-CoV-2 (Covid-19) coronavirus pandemic is a special risk for immunosuppressed and comorbid patients for the fact that severe infections represent one of the major complications of immunosuppressive therapy [1]. Others, as you have published days ago in your journal [2], think that patients (p) with systemic autoimmune diseases and immunosuppression treatment does not associated to negative outcomes and do not seem to carry an increased risk of SARSCoV-2 infection as compared to the general population. As a nephrologists, we treat patients with glomerular pathology that receive immunosuppressive treatment, too and we wanted to review this fact .

Our hospital is a third level complexity hospital that controls an area of about 500,000 habitants (hab) in the city of Barcelona, Spain, the second city with the highest incidence of covid infection in the country. The nephrology service is a reference in complex glomerular diseases in adults (CSUR) in Spain and controls around 500 p per year with this pathology. Patients with glomerular disease are characterized by requiring immunosuppressive treatment both at the time of the outbreak and for its maintenance.

We have reviewed all the patients diagnosed with covid-19 disease in our hospital during the period from 03/23/2020 to 04/19/2020, considered to be the peak of the pandemic in our country. At this periode 2,193 p. came to our hospital. From these, we reviewed all those who had any relationship with the nephrology service and collected the main diagnosis in order to identify how many of them met the diagnosis of glomerular disease (we excluded LES) and to identify those in active immunosuppressive treatment or had received these treatments in the last 2 years.

Finally, 90 patients fulfilled the criteria and only 2 p of them were diagnosed with glomerular disease: the first a 71-year-old male had been diagnosed with P-ANCA microscopic polyangiitis 30 months ago with glomerular filtration of 46 ml / mint / m2 in stable treatment with corticosteroids 5 mg per day and mycophenolate 1000 mgr per day. Required admission for bilateral pneumonia secondary to covid-19 confirmed by PCR. He had a favorable evolution and was released from the hospital after 8 days without further complications. The second patient, a 82-year old male had been diagnosed with P-ANCA microscopic polyangiitis 3 months ago with glomerular filtration of 40 ml / mint / m2, received treatment with Metilprednisolone - and Rituximab, and in a descending course of corticosteroids, was admitted for septic knee arthritis in traumatology medical service and twenty days after admission he presented bilateral pneumonia due to covid-19 confirmed by PCR, the evolution was torpid and comes to death at the few days after diagnosis.

We consider, that although the review cannot lead us to any solid conclusion, it has been a very low incidence for patients with glomerular disease and immunosuppressive treatment who have presented severe Covid-19 disease and, as other authors point out, [2,3,4] we consider that immunosuppression per-se does not have a negative impact, considering, on the contrary, that it could be a protective effect against the virus. Despite the limitation, it would be interesting to collect and study this group of patients first to confirm this suspicion and second to explore possible therapeutic targets against this virus.

Declaration of Competing Interest

The authors disclose no conflict of interest regarding this work.

References

- [1] López V, Vázquez T, Alonso-Titos J, Cabello M, Alonso A, Beneytol, Crespo M, Díaz-Corte C, Franco A, González-Roncero F, Gutíerrez E, Guirado L, Jiménez C, Jironda C, Lauzurica R, Llorente S, Mazuecos A, Paul J, Rodríguez-Benot A, Ruiz JC, S Sánchez-Fructuoso A, Sola E, Torregrosa V, Zarraga S, Hernández D. Recommendations on managemen to the SARS-CoV-2corona virus pandemic (Covid-19) in kidney transplant patients. nefrologia 2020;40(3):265-71.
- [2] Michelena Xabier, Borrell Helena, Lopez-Corbeto Mireia, Lopez-Lasanta María, Moreno Estefanía, Pascual-Pastor María, Erra Alba, Serrat Mayte, Espartal Esther, Anton Susana, caparros-Ruiz Raquel, Pluma Andrea, Trallero-Araguas Ernesto, Barcelo-Bru Mireia, Almirall Miriam, jose De Agustín Juan, Llados Jordi, Julia Antonio, Marsal Sara. Incidence of COVID-19 in a cohort of adult and paediatric patients withrheumatic diseases treated with targeted biologic and synthetic disease-modifying anti-rheumatic drugs. Seminars in Arthritis and Rheumatism 2020;50:56457.
- [3] Tomelleri A, Sartorelli S, Campochiaro C, et al. Ann Rheum Dis Epub ahead of print: [please include Day Month Year]. doi:10.1136/annrheumdis-2020-217600.
- [4] G. Emmi, A. Bettiol, I. Mattioli, et al. Autoimmunity Reviews, https://doi.org/ 10.1016/j.autrev.2020.102575.

Irene Agraz-Pamplona, PhD
Bruno Montoro
Roxana Bury
M Jose Soler
Clara Garcia Carro
Roser Solans
Monica Bolufer
Josefina Cortes
Eugenia Espinel
Daniel Seron

E-mail address: iagraz@vhebron.net (I. Agraz-Pamplona).