



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.



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com



Editorial

Covid-19, the pandemic war: Implication for neurologists



We go to work for you, you stay home for us.

The beginning of the 2020 year corresponds to the emergence of a new coronavirus, called SARS-Cov-2 for severe acute respiratory syndrome coronavirus 2 or COVID-19. This virus has abruptly set the world in a pandemic state as we are entering the blossoming spring. The health, the culture, and the economic stakes are major. The entire medical community is currently working hard to overcome the COVID 19 illness and to consolidate a universal framework to investigate a targeted therapy that could save lives.

For neurologists, the COVID 19 illness has 2 major implications: the first is the protection of the older population which represents the majority of our patients including stroke, dementia, Parkinson's disease, and amyotrophic lateral sclerosis, who are at risk of respiratory failure and multi-organ dysfunction. To date, we only have supportive care and quarantines but we already know that our worldwide health care system is not well-enough equipped to satisfy needs of hospital space and ventilators. The second is the protection of patients with immunosuppressive drugs in auto-immune diseases and brain tumors. We know that among the different factors for a severe course of Covid-19 (hypertension, cardiovascular disease, stroke, diabetes, asthma, obesity...) immunosuppression is also considered an important risk. Oncologists have already published recommendations we can rely on. However, right now, we do not have clear information on the effect of COVID-19 in multiple sclerosis, neuromyelitis optica or myasthenia gravis patients especially treated when immunosuppressive drugs. First reports are encouraging, demonstrating that patients with immunomodulatory treatments could be less at risk due to a quiescent immune state, which decreases the cytokine storm inducing a milder host-inflammatory response when contracting the virus [1]. The French MS effort recently built a registry to collect information with the collaboration of the Société Francophone de la SEP (SFSEP) and the French network for research on MS (FCRIN4MS). We hope that we will be able to have data available from this registry during the next few weeks to help

neurologists manage the patients. The entire MS community (SFSEP, CRCSEP, ARSEP, LFSEP, MIRCEM, OFSEP) edited recommendations for MS patients which might translate to other autoimmune diseases especially regarding immunosuppressive drugs [2].

Eventually, we also observed some neurological complications of COVID-19 such as encephalitis and acute polyradiculitis [3]. It is still unclear if these complications are directly due to the viral infestation or post-infectious auto-immune reactions. The neurological community is currently working to better evaluate and estimate the consequences of this viral war on the neurological field. We are sure that this collective effort, the daily enhancement to the importance of social distancing, sanitization, and general hygiene measures not only for the neurologists but for everyone else will help us to control this health nightmare and to limit its direct and indirect effects. We would like to thank all of you for your contribution to this effort.

Disclosure of interest

The authors declare that they have no competing interest.

REFERENCES

- [1] Mehta P, Mc Auley D, Brown M, Sanchez E, Tattersall RS, Manson JJ. COVID-19: consider cytokine storm syndromes and immunosuppression; 2020. [http://dx.doi.org/10.1016/S0140-6736\(20\)30628-0](http://dx.doi.org/10.1016/S0140-6736(20)30628-0).
- [2] <https://sfsep.org/conseils-a-propos-du-covid-19-pour-les-personnes-atteintes-de-sep/>.
- [3] Ling Mao, Mengdie Wang, Shanghai Chen, Quanwei He, Jiang Chang, Candong Hong. et al. Neurological manifestations of hospitalized patients with COVID-19 in Wuhan, China: a retrospective case series study. *BMJ* 2020. <http://dx.doi.org/10.1101/2020.02.22.20026500>.

J. de Seze

MS Clinic, CHU Strasbourg, 1 Avenue Molière, 67200 Strasbourg,
France

C. Lebrun-Frenay*

MS Clinic, MS Unit research Nice Cote D'Azur University (UR2CA),
Pasteur2 University Hospital, 30 Voie Romaine, 06002 Nice, France

*Corresponding author.

E-mail address: lebrun-frenay.c@chu-nice.fr
(C. Lebrun-Frenay)

<https://doi.org/10.1016/j.neurol.2020.03.002>

0035-3787/© 2020 Elsevier Masson SAS. All rights reserved.