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.

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The big challenge for neurologists in treating patients with multiple sclerosis in the post-COVID-19 era

I read with interest the article by Giovannoni et al (Giovannoni et al.). This paper provides valuable insights into how neurologists deal with the medical problems of patients with multiple sclerosis (MS) during the coronavirus disease (COVID-19) pandemic. It also raises important questions about the consequences of these decisions. The authors rightly argue that the desire to administer less potent medications to prevent both immunosuppression and susceptibility to COVID-19 in patients with MS may actually worsen their disease. Meanwhile, there is no evidence regarding the effect of this virus on the course of MS disease in patients with COVID-19. Moreover, all the pieces of advice about the risk of high-potency drugs such as alemtuzumab and cladribine are based on their mechanisms of action and previous experiences related to the risk of infection in patients who are administered these drugs, and there has been no study on the effects of these drugs on the likelihood of developing COVID-19 or its exacerbation. As the authors have rightly pointed out, some of the drugs used for the treatment of MS, such as interferons and fingolimod, have been used in clinical trials for the treatment of COVID-19 and may have positive results. The answers to these questions depend on the registration of the features, clinical symptoms, and course of the disease in patients with MS affected with COVID-19. Thus, publication of relevant papers in the future can provide us with a suitable solution for similar conditions (Naser moghadasi, In Press). However, the point not addressed by Giovannoni et al. is the challenge faced by neurologists in the treatment of MS in the post-coronavirus period. The COVID-19 pandemic has shown us that we are more vulnerable than we think as *Homo sapiens*. Today, there is a strong possibility that the recent pandemic is not the last of its kind (Gates, 2015). Climate change and human intervention in the environment have made humans more vulnerable. Therefore, neurologists treating patients with MS should not simply think only about controlling the current situation. In fact, utilizing the same methods and guidelines for the management of MS before the coronavirus pandemic may be questioned in the post-coronavirus era as a new disease that can create undesirable conditions in patients whose immune systems have been weakened due to the administered medications and guidelines. Seemingly, in the near future, the safety of medicines should be emphasized and considered in the medical decisions more than ever. Traditional drugs, such as interferons and glatiramer acetate, may be used more frequently in milder cases compared to newer drugs. It may also be necessary to reassess the drug dose escalation strategies, as well as the use and indications of therapeutic methods, such as immune reconstitution therapies. Of course, as Giovannoni et al. have rightly pointed out, there is a strong possibility that these methods might worsen the disease course of patients with MS. Therefore, all the aforementioned points should be discussed carefully, and strong clinical grounds should be found based on the available evidence and studies performed at different centers. Perhaps, there is a consensus on the fact that the COVID-19 pandemic requires us to provide patients with accurate and comprehensive information in critical situations, use telemedicine methods more than before and more efficiently, and work hard in order to reduce risk factors such as smoking, high blood pressure, and diabetes, which increase the risk of complications. We will inevitably be different neurologists, just as the post-coronavirus world will be different according to the viewpoints of politicians, philosophers, and economists.

Declaration of Competing Interest

The author declares there is no conflict of interest

References

Gavin Giovannoni, et al. The COVID-19 pandemic and the use of MS disease-modifying therapies. Mult. Scler. Relat. Disord., https://doi.org/10.1016/j.msard.2020.102073.

Naser moghadasi A. Opportunities and threats: the necessity of research in dealing with the rapid spread of coronavirus disease 2019 (COVID-19) in Iran. Arch Clin Infect Dis. In Press(In Press):e102809. doi: 10.5812/archcid.102809.

Gates, B., 2015. The next epidemic — lessons from Ebola. N. Engl. J. Med. 372, 1381–1384. https://doi.org/10.1056/NEJMp1502918.

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