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Letter to the Editor

Comments on “Initial clinical manifestation of multiple sclerosis after immunization with the Pfizer-BioNTech COVID-19 vaccine” by Fujimori et al., (2021), J Neuroimmunol

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Dear Editors,

I am writing to you to share my opinion on an article recently published in the Journal of Neuroimmunology. This article, entitled “Initial clinical manifestation of multiple sclerosis after immunization with the Pfizer-BioNTech COVID-19 vaccine”, was written by Fujimori et al., and published on Oct 20th, 2021. It reports a single case of a woman developing MS-like symptoms 2 weeks after received the second dose of BNT162b2 vaccine. However, there are several unclear points in that case report that raise questions regarding whether this second dose of vaccine could have triggered the disease onset, as stated in the title.

First, as you know, MS diagnosis is very difficult. There is no specific test for it. According to the 2017 McDonald criteria, MS should be diagnosed after the clinically isolated syndrome (CIS), if dissemination in space and time of lesions in the nervous system is visible by MRI, and after all other possible explanation has been ruled out. It is unclear in this case report if the previous facial nerve palsy suffered by the patient is considered the CIS, or if the patient was diagnosed only on the event happening after the vaccine, and in this case, what is considered temporal dissemination of the lesions. This should be clarified, considering that if the CIS happened before receiving the vaccine, the vaccine cannot be held responsible for disease onset, only, at worst, for a relapse in an already present disease, which remains to be demonstrated.

Second, the authors mention several case reports of MS onset after the patient received this vaccine. However, this data needs to be compared with appropriate MS onsets in absence of vaccine. The authors did compare the relapse rate in vaccinated versus non-vaccinated patients, but somehow, they did not apply this methodology to study the rate of MS onset after receiving the vaccine. No conclusion can thus be made in this regard without similar proper study.

Finally, as stated by the authors themselves: “Although in our case, the onset of MS might have been triggered by the vaccination, it is impossible to decide whether this occurrence is causally linked to the vaccination or a mere coincidence”. However, the title and abstract of this article strongly suggest a conclusion is reached. Title and abstract should reflect the message as discussed in the article, not lean toward one of the possibilities described in the article. I am well aware of the importance of case reports, so the actual secondary effects of vaccines or any other drug can be known and managed. However, this case report, both by its title/abstract and by lacking some important information,

seems biased toward a dangerous effect of the vaccine. I would like to ask for caution while making such a strong conclusion out of a single case, especially on such a controversial topic and during an unprecedented pandemic.

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Declaration of Competing Interest

None.

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References

Fujimori, J., Miyazawa, K., Nakashima, I., 2021. Initial clinical manifestation of multiple sclerosis after immunization with the Pfizer-BioNTech COVID-19 vaccine. *J. Neuroimmunol.* Doi:<https://doi.org/10.1016/j.jneuroim.2021.577755>.

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