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REPLY

Acute polyradiculoneuropathy with SARS-CoV2 vaccines: Reply

We thank Galassi et al for their interest in our study.[1]

This joint report from our two neighboring UK neurology centers presents our experience of cases of acute-onset polyradiculoneuropathy after administration of first doses of severe acute respiratory syndrome–coronavirus 2 (SARS-CoV2) vaccines, between January and June 2021.[2] The first point raised by Galassi et al concerns our comparative incidence rates with previous years. A 2.6-fold increase in number of admissions with acute-onset polyradiculoneuropathy was observed in the time frame of the study, compared not only with the previous year when social distancing and other lockdown measures were in place, but also with the 2 pre-pandemic years. Therefore, we believe this offered a realistic and meaningful comparison of numbers of subjects seen with this presentation in the period of study at our institutions, which corresponded to the start of the roll-out of the vaccination campaign in the UK. Furthermore, no evidence of previous infection was present in our reported post-vaccine cases. The second point raised, regarding the number of cases we observed specifically after the AstraZeneca vaccine, appears, as mentioned by Galassi et al, in keeping with Keh et al's subsequent report, which also demonstrated an increased risk with this vaccine.[3] Similarly, Patone et al[4] and, more recently, Tamborska et al, reporting for the UK Covid vaccine GBS Study Group,[5] both described an excess risk with the AstraZeneca vaccine in UK-wide studies, in keeping with our regional findings. Keh et al reported an increased risk comparable with that of the 1976 swine-flu vaccine,[3] which itself is a notable finding that should be made known to the medical community and patients.

The third point raised by Galassi et al pertains to our observation of more frequent cranial nerve involvement in AstraZeneca-vaccinated patients. We found this, relevantly, in comparison with local historical controls with acute polyradiculoneuropathy. Despite several case series suggesting the same, we agree that caution is required regarding any conclusions. The heterogeneity of clinical presentations in our study, with classical Guillain-Barré syndrome (GBS) cases, bifacial weakness and distal paresthesias, as well as acute-onset chronic inflammatory demyelinating polyneuropathy, otherwise clearly indicates absence of a typical, consistently similar, post-vaccinal form of polyradiculoneuropathy. Since our report, the nationwide study by Keh et al, as cited by Galassi et al, showed no specific characteristics of post-AstraZeneca SARS-CoV2 vaccination polyradiculoneuropathy compared with cases in the post-surveillance period. However, the study by Tamborska et al showed more frequent facial weakness in controls in International Guillain-Barré Syndrome Outcome Study cohorts from Europe and America.[5] We disagree with Galassi et al about the statistical methods that we used, as also used in other studies,[3,5] which compared proportions of subjects with specific features between two groups, and which we consider both adequate and appropriate.

We believe that reporting the experience encountered in clinical practice is essential. In this case, our regional findings were confirmed by larger national and international studies for the main result i.e., an increased risk of polyradiculoneuropathy after the first dose of the SARS-CoV2 AstraZeneca vaccine. Although this risk may not be higher than that of the influenza vaccines,[6] it is important to remember how severe and deadly SARS-CoV2 infection was in 2020 compared with influenza, as well as how many different SARS-CoV2 vaccines became available in 2021. Effective protection against SARS-CoV2 by the vaccine causing the lowest risk of adverse reactions is therefore a legitimate priority for patients and physicians. In our opinion, whether or not specific features of post-vaccinal polyradiculoneuropathy, such as cranial involvement, may exist, is still unknown, but of far lesser importance.

CONFLICT OF INTEREST

Y.A.R. has received speaker/consultancy honoraria from CSL Behring, LFB, Polyneuron, and Argenx; has received educational sponsorships from LFB; and has obtained research grants from CSL Behring and LFB. O.S. and L.K.L. have no disclosures.

DATA AVAILABILITY STATEMENT

No data available in this reply.

ETHICAL PUBLICATION STATEMENT

We confirm that we have read the Journal's position on issues involved in ethical publication and affirm that this report is consistent with those guidelines.

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Abbreviations: GBS, Guillain-Barré syndrome; SARS-CoV2, severe acute respiratory syndrome–coronavirus 2.

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