LETTER TO THE EDITOR

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Post-COVID Guillain-Barre Syndrome: Comparison of Two Reviews

Keywords: SARS-CoV-2, Polyradiculitis, COVID-19, Immune-mediated

With interest we read the review article by Aladawi et al. about the current status of post-COVID Guillain–Barre syndrome (GBS). It was summarised that the most common subtype of post-COVID GBS is acute, inflammatory demyelinating polyneuropathy (AIDP) and frequently associated with peripheral facial palsy. As post-COVID GBS occurs time-linked to the viral infection, a post-infection pathophysiological mechanism was suspected. It was concluded that early diagnosis of post-COVID GBS is important as it might be associated with a severe disease course requiring intensive care and mechanical ventilation. The review is appealing but raises concerns and comments.

The findings in the index review are not new. In a recent review about post-COVID GBS, 220 patients had been collected during a period of 12 months (1/2020 to 12/2020). Age of these patients ranged between 8 and 94 years. Male gender was reported in 146 patients and female gender in 67 cases.² Latency between onset of COVID-19 and onset of GBS ranged from -10 to 90 days. GBS subtypes reported included 118 patients with AIDP, 13 with acute, motor, axonal neuropathy, 11 with acute, motor and sensory, axonal neuropathy, 7 with Miller-Fisher syndrome, 2 with polyneuritis cranialis, and 1 with the pharyngeal-cervical-brachial subtype. SARS-CoV-2 was not detected in the cerebro-spinal fluid in any of the patients. Therapy comprised intravenous immunoglobulins (n = 191), plasmapheresis (n = 15), steroids (n = 2), or no therapy (n = 7). Forty-one patients required artificial ventilation.² Outcome was assessed as complete recovery (n = 37), partial recovery (n = 119), or death (n = 12). These findings are similar to those of Aladawi's study. Surprisingly, the authors do not mention the previous study.² Except for five articles (Nanda, Jones, Chan, Guijarro-Castro, Yacoob), all other references in table 1 of Aladawi's review can be found in table 1 of the previous study.²

There is a strong discrepancy between the methods and the results. According to the method section, the literature search started on the 26th August 2020 and ended on the 7th February 2021. It should be explained why these unusual dates were chosen. Except for three articles (Mackenzie, Mansour, Dufour) no publications published in 2021 were included. Furthermore, 47 articles published before 26th August were included. Either the analysis should be repeated without these 47 articles or the

methods should clearly state that the search started already by January 2020, as in the previous study.

A further limitation is that the methods do not mention that only case reports were included. Though the number of articles mentioned in table 1 of the index study is nearly the same as in the previous review,² the number of patients listed in these almost identical tables is different (220 patients in the previous review² and 99 patients in the index review¹). The difference of 121 patients results from the exclusion of studies which report groups of patients (Foresti, Paterson, Filosto, Keddie). We should be told why these studies were excluded, as they were published within the search period.

Concerning table 1 the citation "Sandeep" is incorrect. The first author is "Rana" and not "Sandeep".

Overall, the study has several limitations which challenge the results and their interpretation. These limitations should be addressed to strengthen the conclusions and to further stimulate the debate. Particularly, an explanation should be provided why the tables are almost identical despite different search periods, why unusual search periods were chosen, and why cohort studies were excluded. We should be informed if the review was written before or after publication of reference 2 or if the author of reference 1 was a reviewer of reference 2.

CONFLICTS OF INTEREST

None.

STATEMENT OF AUTHORSHIP

JF: design, literature search, discussion, first draft, critical comments, final approval.

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REFERENCES

- Aladawi M, Elfil M, Abu-Esheh B, et al. Guillain Barre syndrome as a complication of COVID-19: a systematic review. Can J Neurol Sci. 2022;49:38–48. DOI 10.1017/cjn.2021.102.
- Finsterer J, Scorza FA. Guillain-Barre syndrome in 220 patients with COVID-19. Egypt J Neurol Psychiatr Neurosurg. 2021;57:55. DOI 10.1186/s41983-021-00310-7.