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**Letter to the Editor**

# Diagnose post-SARS-CoV-2 Guillain Barre syndrome in infants according to established criteria

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We read with interest the article by Anonymous *et al*. about a 3yo female who developed progressive, ascending quadriparesis two weeks after onset of a respiratory infections with SARS-CoV-2 [1]. In addition to muscle weakness, the patient presented with sensory disturbances and dysphagia [1]. Since investigations of the cerebrospinal fluid (CSF) showed a dissociation cyto-albuminique, Guillain-Barre syndrome (GBS) was diagnosed and treatment with intravenous immunoglobulins (IVIG) initiated, which led to incomplete recovery at the last follow-up [1]. The study is appealing but raises concerns that need to be discussed.

The main limitation of the study is that the diagnosis GBS was not supported by nerve conduction studies (NCSs) [1]. NCSs are not only required for application of diagnostic criteria (Brighton, Haddon, Besta) but also to assess if the clinical presentation was due to an axonal or demyelinating lesion. Knowing the electrophysiological diagnosis is crucial as the outcome and prognosis varies significantly between these two subtypes of GBS.

Another limitation of the study is that no explanation for the cause of dysphagia was provided. We should be told if dysphagia was due to involvement of the cranial nerves X and IX or due to Bickerstaff encephalitis, we do not agree that the most frequent extra-pulmonary manifestations of COVID-19 are cardiac, renal, and gastrointestinal abnormalities [1]. The most common extra-pulmonary manifestations of COVID-19 are neurological diseases not only of the peripheral nervous system (PNS) but also of the central nervous system (CNS) (neuro-COVID) [2]. Neurotropism of the SARS-CoV-2 virus most likely stems from abundance of ACE2 receptors on the surface of neurons, myelin cells, and glial cells.

Missing in the cases presentation are the references limits for serum and CSF parameters. Knowing reference limits is crucial for assessing what is normal or abnormal and to assess the degree of abnormality.

We do not agree with the statement that meningo-encephalitis and GBS are “signs” [1]. GBS and encephalitis are neurological diagnoses, why the description should be adapted accordingly.

We do not agree with the representation that neuro-COVID is due to a direct infectious injury. Most the manifestations of neuro-COVID are due to the abnormal immune response of the host against the virus.

Overall, the interesting study has limitations that call the results and their interpretation into question. Clarifying these weaknesses would strengthen the conclusions and could enhance the study.

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**Consent to participate:** was obtained from the patient

**Consent for publication:** was obtained from the patient

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**Code availability:** not applicable

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**References**

1. El Mezzeoui S, Aftiss FZ, Aabdi M, Bkiyar H, Housni B. Guillan barre syndrome in post Covid-19 infection in children. Ann Med Surg (Lond). 2021; 67:102524. Doi: 10.1016/j.amsu.2021.102524.
2. Finsterer J, Scorza FA, Scorza CA. Presentation and pathophysiology of neuro-COVID. Drugs Context. 2021; 10:2021-6-5. Doi: 10.7573/dic.2021-6-5.