



# Guillain–Barré Syndrome with Normal Nerve Conduction Study Associated with COVID-19 Infection in a Child

Tooba Qamar<sup>1</sup> · Sunil Kumar<sup>1</sup> · Sarika Gupta<sup>1</sup> · Shally Awasthi<sup>1</sup>

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*To the Editor:* Post COVID-19, few have reported Guillain–Barré syndrome (GBS), possibly due to aberrant immune response causing antigen mimicry, resulting in neuronal damage. We report a case of 6-y-old girl who presented to us at day 5 from onset of neurological symptoms, in the form of acute, progressive weakness of lower limbs with no history of recent infection. The patient’s father had COVID-19 infection 1 mo back. She had bilateral upper and lower limb flaccid weakness of 3/5 affecting both proximal and distal muscles equally, with absent deep-tendon reflexes (DTRs) and preserved superficial reflexes. COVID-19 RT-PCR was negative but COVID antibodies were positive. CSF examination revealed albuminocytological dissociation and MRI lumbosacral spine showed patchy meningeal enhancement at the level of conus medullaris. First nerve conduction study (NCS) was done 7 d from the onset of neurological symptoms, i.e., at day 2 of admission, and second NCS was done after 12 d, i.e., at day 7 of admission; both were normal. Serum potassium levels were normal and CPK was not done. IVIG (@ 2 g/kg), was transfused over two days. The patient was discharged with 4/5 power across all limbs but absent DTRs. Diagnosis of GBS is based mainly on history and examination. NCS assists in diagnosis but they can be completely normal in acute phase and a normal study does not rule out GBS [1]. There is variation in clinical presentation and lab parameters of patients with COVID-associated GBS [2, 3]. Krishnakumar et al. described GBS with preserved reflexes in a child after COVID-19 infection [4]. Our patient had GBS with normal nerve conduction study. To the

best of our knowledge, this is the first study of post-COVID GBS with normal nerve conduction study, further strengthening the heterogeneity of the disease.

## Declarations

**Consent to Publish** Written consent was obtained from the patient’s father.

**Conflict of Interest** None.

## References

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✉ Tooba Qamar  
tooba2509@gmail.com

<sup>1</sup> Department of Pediatrics, King George’s Medical University, Lucknow, Uttar Pradesh 226003, India