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Letter to the Editor

NINDS, Cornblath, Asbury, or Brighton criteria for diagnosing COVID-19 associated Guillain-Barre syndrome?

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We read with interest the article by Chakraborty *et al*. about eight patients with Guillain-Barre syndrome (GBS), 3 with subtype acute, inflammatory demyelinating polyneuropathy (AIDP-1 AIDP-2, AIDP-3), 2 with acute, motor and sensory, axonal neuropathy (AMSAN-1, AMSAN-2), and 3 with acute, motor, axonal neuropathy (AMAN-1, AMAN-2. AMAN-3) diagnosed according to the Asbury criteria [1]. The study is appealing but raises comments and concerns.

GBS can be diagnosed according to various different criteria. We should know why the Asbury criteria were applied. Disadvantage of the Asbury criteria is that nerve conduction studies (NCSs) and cerebro-spinal fluid (CSF) investigations are not compelling [2].

GBS should not only be differentiated from critical-ill neuropathy or myopathy but also from neuronopathy, polyneuropathy, plexopathy, drug-induced neuropathy, and compression neuropathy.

We should know the cause of death in AIDP-2 and AMSAN-1. Did these patients die from COVID-19 or from involvement of the respiratory muscles in GBS?

Descending muscle weakness in AMAN-1 is quite unusual for GBS. An explanation for this unusually phenotype should be provided, particularly if the patient had another disease. Particularly excluded should be SARS-CoV-2 associated autoimmune plexitis, which typically manifests with proximal weakness [3]. Did AMAN-1 also complain about pain?

There is a discrepancy between the description of AIDP-2 in the text and in table-2 [1]. In the text AIDP-2 succumbed but in table-2 he was "discharged" [1].

Four patients were described with dysautonomia. We should be told which autonomic dysfunctions were found.

We should know why AMAN-1 and AMAN-2 were classified as AMAN although both were described with autonomic dysfunction in table-2 [1].

Five patients had fever at onset according to table-1 but according to the Asbury criteria, fever should be absent at onset.

According to table-2, four patients required mechanical ventilation. Was respiratory insufficiency attributable to COVID-19, to the GBS, or to both?

There is a discrepancy between table-1 and table-2 regarding the Erasmus GBS respiratory insufficiency (EGRIS) and the need for mechanical ventilation [1]. AIDP-3, AMSAN-1, AMAN-1 and AMAN-3 were ventilated but EGRIS was 6 in AIDP-2. Why was this patient not ventilated?

According to the methods, patients were followed up for 6 months but the 6m follow-up data were not provided. It would be interesting to know the 6m outcome of those who survived.

Overall, the interesting case series has several limitations, which challenge the results and their interpretation. As CSF and NCS investigations according to the Asbury criteria are not mandatory, the Brighton criteria should be applied for diagnosing SARS-CoV-2 associated GBS.

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