

# Reply to Letter to the Editor: A Fatal Case of Acute Disseminated Encephalomyelitis—A Diagnosis to Ponder in Pandemic

Amber Kumar<sup>1</sup>, Pranshuta Sabharwal<sup>2</sup>, Prasoon Gupta<sup>3</sup>, Vinod Kumar Singh<sup>4</sup>, BK Rao<sup>5</sup>

**Keywords:** Acute disseminated encephalomyelitis, Coronavirus disease-2019, Pandemic.

*Indian Journal of Critical Care Medicine* (2022): 10.5005/jp-journals-10071-24304

We thank Professor Josef Finsterer for his interest in the case report and highly appreciate the valuable comments. We would like to address the concerns raised in the given paper and try to answer to their satisfaction. The following case definitions for acute disseminated encephalomyelitis (ADEM) have been extracted from Sejvar et al. and the Brighton Collaboration Encephalitis Working Group in which cerebrospinal fluid (CSF) is not a diagnostic criterion.<sup>1</sup> In our case, the patient did not undergo a second spinal tap before decreasing due to its fulminant course. The patient received gadolinium contrast for the cerebral magnetic resonance imaging (MRI). There was no evidence of optic nerve involvement in neuroimaging, and as far as aquaporin-4 antibodies (AQP-4 IgG) are concerned, it is not an essential criterion for neuromyelitis optica spectrum disorder. A detailed discussion of lesions present was done with the radiologist in both SWI/DWI images to rule out acute hemorrhagic leukoencephalitis. As far as central nervous system vasculitis is concerned, we sent antinuclear antibodies and antineutrophil cytoplasmic antibodies, and both were found to be negative. The course of events of the illness was so rapid that the brain biopsy and repeat imaging, considering the critical condition of the patient, was not feasible. Through our article, we wanted to highlight that the diagnosis of ADEM should be kept in mind when the patient presents with acute febrile illness associated with progressive ascending paralysis and myalgias in this coronavirus disease-2019 (COVID-19) pandemic. Due to word limitations, we only shared absolutely relevant data and images. Yes, interleukin IL-6, IL-8, IL-1a, and TNF-alpha were sent and elevated in this patient, which strengthen our suspicion along with high total COVID antibody titer in CSF. The above-mentioned patient didn't undergo an autopsy. Hope the above-mentioned points would help in understanding this case

<sup>1-5</sup>Department of Critical Care Medicine, Sir Ganga Ram Hospital, New Delhi, India

**Corresponding Author:** Prasoon Gupta, Department of Critical Care Medicine, Sir Ganga Ram Hospital, New Delhi, India, Phone: +91 9891571699, e-mail: dr.prasoon\_gupta@yahoo.com

**How to cite this article:** Kumar A, Sabharwal P, Gupta P, Singh VK, Rao BK. Reply to Letter to the Editor: A Fatal Case of Acute Disseminated Encephalomyelitis—A Diagnosis to Ponder in Pandemic. *Indian J Crit Care Med* 2022;26(9):1062.

**Source of support:** Nil

**Conflict of interest:** None

report and our intent for considering a rare diagnosis in a better way in this pandemic era.

## ORCID

Amber Kumar  <https://orcid.org/0000-0003-3411-5917>

Pranshuta Sabharwal  <https://orcid.org/0000-0003-3914-5867>

Prasoon Gupta  <https://orcid.org/0000-0003-0590-3375>

Vinod Kumar Singh  <https://orcid.org/0000-0002-1714-6466>

BK Rao  <https://orcid.org/0000-0002-1968-097X>

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