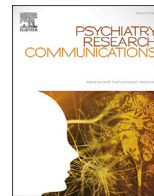




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Response letter: Neuropsychiatric presentation of Covid-19-related encephalitis: Case report



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ABSTRACT

Covid-19-related encephalitis is a heterogeneous syndrome characterized by a combination of clinical, laboratory, and imaging features related to inflammation of the brain, where the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is presumably the causative agent. We reported a case of Covid-19-related encephalitis presenting with neuropsychiatric symptoms, including intense agitation. Reverse-transcriptase polymerase-chain-reaction in cerebrospinal fluid was positive for SARS-CoV-2. Our case expands the literature about neurologic manifestations of Covid-19 and emphasizes the possibility of prominent behavioral symptoms as the initial manifestation.

Dear editor

We are pleased with the interest of Finsterer and Scorza, 2022 in our case report and agree with their wish for clarification in some aspects of the case.

The first manifestation was neuropsychiatric symptoms such as agitation, anxiety, restlessness, and aggressivity. This constellation of symptoms started 72 hours before the first seizure. The first seizure was focal with abnormal motor activity in the left arm, occurring 2 times in the same day and during less than 2 minutes. On the following day (fifth day of symptoms), the patient had 3 generalized tonic-clonic seizures on the same day. His wife witnessed all the seizures. He recovered consciousness between the episodes.

He was treated with 1g/day levetiracetam. Even with control of seizures, his behavior degraded, and he needed in-hospital evaluation.

After hospital admission, the electroencephalogram did not depict epileptic activity despite worsening neuropsychiatric symptoms. Olanzapine was introduced to decrease agitation and aggression.

After the positive RT-PCR for SARS-CoV-2 and the diagnosis of encephalitis due to Covid-19, a pulse of corticosteroids was tried (intravenous methylprednisolone). However, the neuropsychiatric abnormalities did not abate.

The patient evolved with somnolence and fluctuation of his level of consciousness, but not into a coma. He developed a rapidly progressive respiratory failure and needed mechanical ventilation and admission to the intensive care unit.

We agree with the claim that advanced neuroimaging would be

necessary in this case. However, it was not available in the facility he was admitted. The MRI did not show abnormal contrast enhancement or signals of venous sinus thrombosis. An MRI venography was not performed.

We agree that the diagnosis was infectious encephalitis, not immune-mediated. This is written in the first paragraph of the discussion "We reported a case of encephalitis due to Covid-19 with positive CSF RT-PCR for SARS-CoV-2, in which agitation was the first symptom (Orsini et al., 2021). We argued that the clinical criteria for immune-mediated encephalitis may be used as a guide for general encephalitis, not that the etiology of the reported case is immune-mediated.

The patient did not report a headache at any time of his illness.

We hope this added information will help clarifying the data, and strength our conclusion that the neuropsychiatric features were due to infectious encephalitis caused by SARS-CoV-2.

Declaration of competing interest

The authors report no conflict of interest.

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