

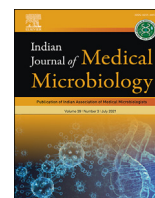


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Letter to Editor

Fatalities of COVID-19 are rather attributable to multisystem inflammatory syndrome than infectious meningitis or sepsis



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Dear Editor

With interest we read the article by Dharsandiya et al. about a 68yo male with severe COVID-19 complicated by multi-organ involvement, sepsis, and death [1]. We have the following comments.

The main shortcoming is that the patient was diagnosed with meningo-encephalitis without documentation of an infectious agent. Spinal tap showed only mild pleocytosis (20/3). We should know if cerebro-spinal fluid (CSF) investigations were positive for SARS-CoV-2, if CSF was investigated for viruses other than SARS-CoV-2, and if CSF cultures were positive for bacteria, tuberculosis, or fungi. Missing is a cerebral MRI with contrast medium confirming the suspected meningo-encephalitis. Given the reported data, it is conceivable that the patient rather experienced immune-encephalitis than infectious encephalitis.

A second shortcoming is that no explanation for hyper-creatinemia (CK)emia already on admission was provided. We should know if hyper-CKemia was due to seizures, myocardial infarction, myocarditis, or muscle injury prior to admission [2]. There are also indications that COVID-19 can be complicated by myositis, myopathy, or rhabdomyolysis [3,4]. Unfortunately, follow-up CK values were not provided, why the further course of serum-CK remains undetermined.

We do not agree with the diagnosis “viral sepsis”. “Viral sepsis” requires per definition viremia. However, neither SARS-CoV-2 nor any other virus was found. Sepsis usually manifests with elevated C-reactive protein and pro-calcitonin but both parameters were normal, why the diagnosis “viral sepsis” remains questionable.

Concerning the treatment, we should know the rationale for simultaneous anticoagulation and antithrombotic treatment (acetyl-salicylic acid). We should know the rationale for applying chloroquine, as it is ineffective for COVID-19. We should know which antiepileptics were given and if any drug caused side-effects.

Missing are reference limits making the interpretation of the laboratory blood values difficult. CSF glucose of 137mg/dl suggests diabetes.

Overall, the case report has a number of shortcomings, which should be addressed before diagnosing infectious meningo-encephalitis and sepsis.

Statement of ethics

Statement of ethics was in accordance if ethical guidelines.

Funding sources

No funding was received.

Author contribution

JF: design, literature search, discussion, first draft, critical comments, final approval.

Informed consent

Informed consent was obtained.
 The study was approved by the institutional review board.

Declaration of competing interest

None.

Acknowledgement

none.

References

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J. Finsterer*

Klinik Landstrasse, Messerli Institute, Vienna, Austria

Fulvio A. Scorza

*Disciplina de Neurociência, Escola Paulista de Medicina/Universidade
Federal de São Paulo/. (EPM/UNIFESP), São Paulo, Brazil*

E-mail address: scorza@unifesp.br.

* Corresponding author. Postfach 20, 1180, Vienna, Austria.

E-mail address: fifigs1@ahoo.de (J. Finsterer).