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REPLY TO LETTER

Reply to COVID-19 encephalopathy, Bayes rule, and a plea for case–control studies

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We thank Arbona-Haddad and colleagues for their interest in our study of the neurologic manifestations of Covid-19 in the first 509 patients hospitalized in our hospital network system.[1,2]

By reanalyzing our data using a Bayesian approach, they came to a similar conclusion regarding the high frequency of encephalopathy in patients with severe Covid-19 disease requiring mechanical ventilation.

Their opinion that Covid-19 suspected cases admitted during the same period with a negative test result could serve as acceptable controls is interesting. However, these control subjects would include a heterogenous population of patients with numerous other viral infections, sepsis, febrile illnesses, respiratory, and neurologic diseases, complicating their use as feasible controls. In addition, these individuals would also potentially include Covid-19 patients with false negative test results.

As the entire country is witnessing a surge of infections, neurologists will be on the frontlines to diagnose and manage the multiple neurologic manifestations of Covid-19. Neurologists will also play a critical role in the pandemic recovery as the neurologic consequences of Covid-19 appear to linger long after the resolution of the pulmonary manifestations.

Conflict of Interest

None.

References

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2. Arbona-Haddad E, Tremont-Lukats IW, Gogia B, Rai PK. Covid-19 encephalopathy, Bayes rule, and the plea for case-control studies, Ann Clin Transl Neurol.