

**Comment on: Outbreak of COVID-19 – an urgent need for good science to silence our fears?**Singapore Med J 2020; 61(4): 222 <https://doi.org/10.11622/smedj.2020056>

Dear Sir,

I read with interest the excellent article by Lum and Tambyah about considerations on the recent outbreak of the coronavirus disease 2019 (COVID-19) epidemic in Wuhan, which had more than 50,000 infected patients and over 1,300 fatalities at the time of writing.<sup>(1)</sup> We have some comments and suggestions.

Although COVID-19 predominantly affects the lungs, neurotoxicity cannot be excluded. Since involvement of the central nervous system (CNS) and peripheral nervous system (PNS) is conceivable, patients with CNS manifestations (i.e. headache, visual impairment, seizures, personality change, anosmia, ageusia, fatigue and cognitive impairment) in COVID-19 should be systematically screened for neurological involvement.

During the Middle East Respiratory Syndrome epidemic in 2012, some patients experienced Bickerstaff's encephalitis, Guillain-Barré syndrome and other neuropathies.<sup>(2)</sup> Since SARS in 2002 was also complicated by meningitis/encephalitis<sup>(3)</sup> and neuropathy,<sup>(4)</sup> it is conceivable that there is also CNS involvement in COVID-19 patients. Thus, we should find out how many of the COVID-19 patients developed headache, personality change, apathy, bradyphrenia, oversensitivity to light or noise, epilepsy or other manifestations indicative of CNS involvement. Headache was reported to be one of the concomitant manifestations in a number of COVID-19 patients.<sup>(5)</sup> In patients who die from the infection, autopsy of the CNS and PNS should be carried out to systematically investigate whether these organs are additionally compromised.

Overall, the interesting considerations by Lum and Tambyah suggest that comprehensive, prospective investigations are required to adequately manage COVID-19 patients. These include not only infectiological, pulmological and cardiac screening but also neurological work-up. The more we learn about affected individuals, the more we can do for science and the community, regionally and globally.

Yours sincerely,

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