REPLY:

We thank Dr Pathum Sookaromdee and Professor Viroj Wiwanitkit for their interest in our recent publication.[1] The authors have stated that the brain imaging findings in cases with dengue infection are nonspecific and are of little help in diagnosis, management, or prognostication.

To the best of our knowledge, our study is the single largest dataset that includes positive cases of dengue infection with neurologic symptoms attributed to the brain involvement. All these cases have undergone cranial imaging. Our study demonstrates imaging features that may help to clinically raise the possibility of arboviral infections and also help in prognostication. The data published in this study show significant association with poor clinical outcome, which is defined as death or the presence of neurologic deficits at discharge with involvement of the thalami and cerebellar peduncles and the presence of diffusion restriction and micro-/macrohemorrhages.

Reference articles 2, 3, and 5 used by the authors have little radiologic data, if any, to support their argument. Reference article 4 includes description of 6 cases, a small number to draw any conclusions.

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Clinical differentiation between dengue-related encephalopathy and encephalitis is difficult because almost all such cases have significant metabolic derangement. The outcome related to encephalitis is likely to be poorer compared with encephalopathy, and imaging has an important role in this differentiation. By demonstrating brain parenchymal involvement, one would have additional evidence to favor encephalitis over encephalopathy and thus a guide to prognostication. Given improved medical management of metabolic derangement and multiple-organ dysfunctions as seen with severe dengue, the role of imaging to help in management (to rule out large hemorrhages) and prognostication cannot be overemphasized.

REFERENCE

1. Vanjare HA, Mannam P, Mishra AK, et al. **Brain imaging in cases with positive serology for dengue with neurologic symptoms: a clinicoradiologic correlation.** *AJNR Am J Neuroradiol* 2018;39:699–703 CrossRef Medline

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