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## Human Knowlesi Malaria and Neurological Complication: A New Thing to be Discussed in Tropical Neurology

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Editor, malaria is accepted as an actual global public health threat. Annually, there are many thousand cases of malaria around the world. For a few years, the newest species of malaria, the knowlesi malaria, has been proposed for its importance<sup>(1)</sup>. From its primary site in Malaysian Borneo, it is presently detectable and widespread throughout the world. However, cases are confined to Southeast Asian countries, in rural areas where the long-tailed and pig-tailed macaques and mosquito vectors are found. As a zoonosis, this disease is a new emerging infectious disease of concern. The neurological complication of knowlesi malaria is an interesting topic in tropical neurology. There are very publications on this aspect. In 2010, Cox-Singh reported on a fatal case of knowlesi malaria and stated that cerebral pathology can be seen similar to falciparum malaria<sup>(2)</sup>. Although some studies have been done on pathology in rhesus macaques, the exact pathobiology of neurological involvement in human knowlesi malaria has never been clarified. The study on the neurological manifestation of knowlesi malaria is the interesting direction in future research in tropical neurology. The authors merely raise

a question that remains to be answered. Even for falciparum malaria, where there is cerebral complication, there is normally no neurological sequelae. Even for falciparum malaria, which resultes in at least a million deaths per year, the exact pathobiology of neurological involvement is not known. It would need a significant number of severe knowlesi malaria cases to answer the question posed by the author, and such a number would be difficult to attain given the rare occurence of knowlesi malaria.

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