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Acute hypokalemic quadriparesis in dengue illness

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To the editor.

Dengue is a common arboviral infection that can be seen in tropical countries, especially for South and Southeast Asia. This can be a deadly infection affecting the hematological system which can result in severe hemorrhagic complications. Generally, dengue manifests as an acute febrile illness with the alteration of platelet^[1]. However, there are also some uncommon clinical presentations of dengue which can be a difficulty in diagnosis^[1]. An interest uncommon presentation is "acute hypokalemic quadriparesis". This condition is seldom reported. The authors hereby tried to summarize on the published cases on this problem to study its nature.

The authors hereby use the standard searching (PubMed) to find the publication on acute hypokalemic quadriparesis in dengue. The key words are "acute hypokalemic quadriparesis" and "dengue". According to the search, there are at least 4 reports on 6 dengue cases with acute hypokalemic quadriparesis[2–5]. Of interest, all cases are from India. All cases presented with the neurological complaint and finally diagnosed to have dengue. The laboratory diagnosis of hypokalemia can be seen but not all cases have virological confirmation of dengue.

Based on the review, it can be said that dengue can be seen at the same time with acute hypokalemic quadriparesis. Hence, it can be a co-morbidity. However, it is still a myth for the exact pathophysiological process that leads to acute hypokalemic quadriparesis. There is still no proof based on Koch's prostulation principle. In fact, not only dengue but also other tropical infections such as leptospirosis[6] can co-present with acute hypokalemic quadriparesis. An interesting possible explanation is the

pathological process might not be due to the germ but other additional confounding condition such as drug induced hypokaelmia^[7].

Conflict of interest statement

We declare that we have no conflict of interest.

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