

Dengue fever in end-stage renal failure patient case report and updated literature review in the diagnostic and management challenges

ABSTRACT

Dengue viral infection is common in tropical and subtropical parts of the world and may lead to death. There are an estimated 390 million cases of dengue viral infections reported worldwide each year, putting 2.5 billion individuals at risk of this arthropod-borne viruses. The cornerstone of its management is prompt diagnosis, appropriate monitoring, and careful fluid replacement. This is particularly difficult in end-stage renal failure (ESRF) patients on maintenance dialysis, as there is a complex issue of the ability of making a prompt diagnosis, the presence of coagulopathy, and the risk of fluid overload due to constant evolving fluid dynamic as part of the dengue fever disease process. There is a serious lack of literature report in the area of dengue infection in ESRF patient. We report a case of a man with ESRF with a delayed diagnosis of dengue viral infection, who admitted at the critical phase of the illness. Despite that, he managed to recover uneventfully with tailored management in his fluid replacement, medication adjustment, and dialysis prescription. Hence, a high index of suspicion is needed when an ESRF patient presents with fever in a dengue-endemic area. A multidisciplinary approach with good collaboration between physician and nephrologist is needed to ensure the best outcome. Renal replacement therapy and medications should be individually tailored according to the patient's clinical condition. We hope that our reported clinical case will contribute to the understanding of the complex issue of management of dengue fever in ESRF patients.

Keyword: End-stage renal failure; Hemodialysis; Dengue fever