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Abstract

Published 04/22/2024

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Categories: Neurology, Internal Medicine, Infectious Disease

Keywords: dengue, convulsion, leptomenigeal, meningitis, flavivirus

How to cite this abstract

Patel S, Patel K S, Sata Y (April 22, 2024) Dengue Meningitis: A Rare and Critical complication -A Case Report. Cureus 16(4): a1247

Abstract

INTRODUCTION:

Dengue, a flavivirus disease, is recognized as one of the most important mosquito-borne human infections. Apart from the typical manifestations, the virus can elicit atypical complications. Among these complications, dengue meningitis stands out as a clinical rarity.

AIM:

This abstract introduces a case report focusing on the distinctive intersection of dengue and meningitis.

CLINICAL DESCRIPTION:

A 24-year-old male presented with a 10-day history of high-grade fever, accompanied by chills, rigor, and headache, which responded to analgesics. Subsequently, he developed altered sensorium, speech difficulties, drowsiness, and irritability over 3 days. Physical examination revealed nuchal rigidity and positive Kernig sign. Cerebrospinal fluid (CSF) analysis showed clear CSF with elevated protein (166mg/dL), elevated lactate (3.8mmol/L), and normal glucose levels (39mg/dL), with no white or red blood cells detected. CSF gram stain was negative for microorganisms. MRI revealed leptomenigeal enhancement in bilateral frontal-parietal-occipital lobes and pachymeningeal enhancement along both limbs of the tentorium cerebelli, indicative of meningitis. A blood workup showed leukocytosis and low mean platelet volume. Capture ELISA confirmed the presence of Dengue IgM antibodies. On admission, the patient was treated with intravenous ceftriaxone, acyclovir, vancomycin, dexamethasone, and supportively for 14 days, with CSF follow-up after 7 days. On the fourth day of admission, he experienced an episode of convulsion characterized by uprolling of eyes, and clenching of teeth, followed by postictal drowsiness, necessitating administration of intravenous levetiracetam and midazolam. His condition was monitored and managed with ongoing treatment. On follow-up after 7 days, his condition improved without neurological deficits.

CONCLUSION:

This case underscores the clinical spectrum of dengue infection, including its potential to manifest neurological complications like meningitis. It emphasizes the importance of considering arboviral etiologies in the differential diagnosis of CNS manifestations, as well as the complexities involved in their diagnosis and management.