36. DENGUE: NEUROLOGICAL MANIFESTATIONS, CASE SERIES IN A TERTIARY HOSPITAL IN CENTRAL COLOMBIA

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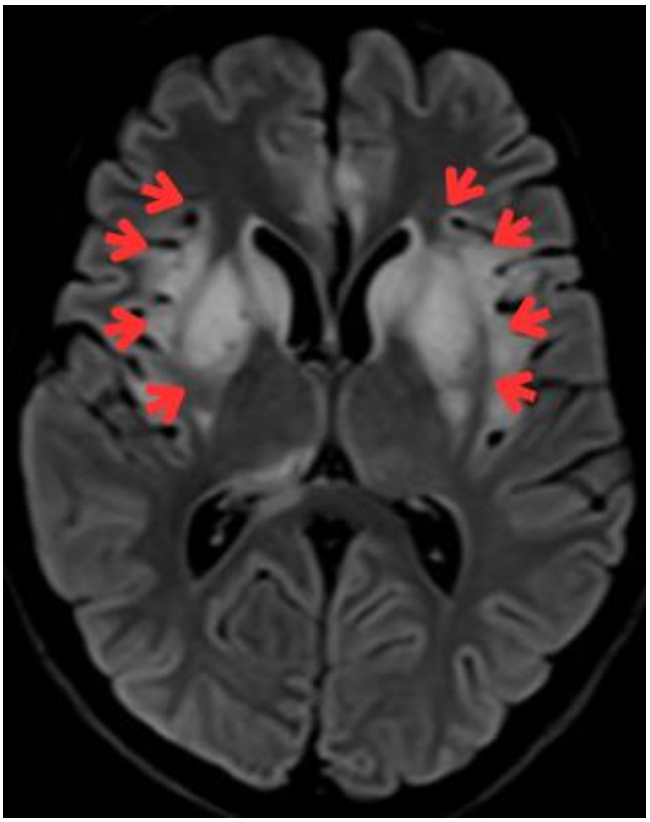
https://www.youtube.com/live/fSpXH-3Xy5w?t=25043s

ABSTRACT.
Dengue virus infection, an arbovirus endemic to South America, represents an increasing public health concern due to its ability to produce a wide spectrum of clinical manifestations, including neurological complications stemming from its high genetic diversity and neurotropic potential. Despite the growing evidence linking dengue with these neurological complications, gaps remain in understanding the pathogenic mechanisms, risk factors, and optimal management of these patients. Therefore, this case series report aims to describe the clinical characteristics, management, and outcomes of patients with dengue who developed complications such as encephalopathy and encephalitis due to this virus, thus contributing to a broader understanding of this clinical entity and improving prevention and management strategies. **CASE 1:**A 23-year-old male presented to the emergency department with febrile symptoms, dizziness, abdominal pain, hematemesis, diarrhea, and seizures. Dengue with encephalitis and intracranial hemorrhage was suspected. The patient was administered mechanical ventilation, deep sedation, and anticonvulsants. Tests revealed severe thrombocytopenia and signs of dengue. A CT scan ruled out hemorrhage, and dengue encephalitis was diagnosed. Treatment was adjusted, and the patient was extubated with neurological improvement before discharge. **CASE 2**: An 83-year-old male with significant medical history presented with fever, asthenia, headache, and severe thrombocytopenia. The diagnosis was severe dengue with decompensated heart failure. Despite platelet transfusion and ICU management, the patient developed status epilepticus and a subdural hematoma on CT. He was treated with anticonvulsants and, after stabilization, was transferred to inpatient care with a long-term management plan. **CASE 3:** An 18-year-old male was admitted with progressive headache, fever, and episodes of vomiting and seizures. CT showed cerebral edema, and CSF indicated non-herpetic viral encephalitis. After discontinuing antibiotics and continuing with acyclovir, dengue encephalitis was confirmed. Despite a positive clinical evolution, seizures persisted. Additional studies showed brain damage secondary to hypoxia, and the patient was discharged with recommendations and follow-up. **CONCLUSION:** The cases emphasize the critical need to consider dengue as a trigger for severe neurological complications, underscoring the importance of timely clinical evaluation and management to improve patient outcomes. Dengue's impact on both the central and peripheral nervous systems highlights its relevance as a differential diagnosis in patients with acute neurological alterations, particularly in endemic areas. A multidisciplinary approach is essential in managing these complications, while ongoing surveillance, public awareness, and the potential for an effective vaccine offer hope for early intervention and reduced morbidity and mortality.

Figure: Contrast-Enhanced Magnetic Resonance Imaging Demonstrating Bilateral Nucleobasal Hyperintensities with Involvement of the Insular, Frontal Cortex, and Thalamus in a Case of Dengue Encephalitis.



Legend: The red arrows highlight areas of hyperintensity indicating inflammation and edema, which are consistent with dengue encephalitis. These findings include bilateral nucleobasal regions and additional involvement of the insular cortex, frontal cortex, and thalamus.

Key Words: Dengue; Neurology; Tropical; Encephalopathy; Encephalitis; Aedes aegypti.