CASE REPORT – A CASE OF DENGUE ENCEPHALITIS

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ABSTRACT

Dengue is an arthropod borne virus characterized by biphasic fever, myalgia or arthralgia, rash, leucopenia, thrombocytopenia and lymphadenopathy. Dengue virus belongs to flaviviridae and there are four distinct antigenic types (DENV 1, DENV 2, DENV 3, DENV 4). The clinical spectrum of dengue fever ranges from asymptomatic infection to dengue shock syndrome. Unlike other arboviral infections, dengue virus does not usually cause neurological manifestations. However, in recent years, neurological manifestations of dengue have been documented. We are reporting a case of dengue encephalitis from Bengaluru, south India. Dengue ELISA NS1 positive and IgM positive. CSF PCR was negative for herpes simplex 1 and 2.

Keyword: - dengue encephalitis, ELISA NS1, DENV 1, DENV 2, DENV 3, DENV 4

INTRODUCTION

Dengue is an arthropod borne virus characterized by biphasic fever, myalgia or arthralgia rash, leucopenia, thrombocytopenia and lymphadenopathy. Dengue virus belongs to flaviviridae and there are four distinct antigenic types (DENV 1, DENV 2, DENV 3, DENV 4). The clinical spectrum of dengue fever ranges from asymptomatic infection to dengue shock syndrome. Unlike other arboviral infections, dengue virus does not usually cause neurological manifestations. However, in recent years, neurological manifestations of dengue have been documented.

CASE REPORT

A 3 year old male child admitted to PICU with c/o fever since 3 days, altered sensorium since 1 day and multiple episodes of GTCS convulsions. There was no past history of seizures. On admission PR 140 bpm RR 30cpm cft<3 sec BP 90/60 mmHg, GCS 5/15, pupil sluggishly reactive, with hypertonia of the all limbs and decorticate posture. Child was intubated. Investigations were sent and it showed dengue ELISA NS1 positive and IgM positive, hemoglobin – 12.8 g/dl, total count 2800 cells/cu.mm, platelet 0.55 thousands, serum electrolyte, renal functional and liver function test were normal, malarial test negative. CSF analysis cell count 01, type lymphocyte, protein - 41 mg/dl, glucose – 59 mg/dl, CSF gram stain and culture negative, CSF PCR negative for herpes simplex 1 and 2. MRI brain done suggestive of viral encephalitis. He was treated with antiepileptic drugs and symptomatic treatment was given. Later child was discharged from the hospital after 20 days.
DISCUSSION

Dengue virus has four serotypes (DENV-1 to DENV-4) Dengue usually presents with fever, headache, rashes and hemorrhagic manifestations. Dengue is classically thought to be a non-neurotropic virus[1]. The serotypes, most frequently implicated in causing neurological manifestations are DEN2 and DEN3. The main symptoms of dengue encephalitis are headache, seizures and altered consciousness[2]. Typical symptoms of dengue fever like myalgia, rash and bleeding are seen in less than 50% of encephalitis cases. MRI findings in dengue vary. MRI may be normal but hemorrhages, cerebral edema, and focal abnormalities involving the basal ganglia, hippocampus and thalamus can be seen.

CONCLUSION

Common infections in routine clinical practice that cause fever with altered sensorium in our country are cerebral malaria, herpes encephalitis and Bacterial meningitis. Dengue encephalitis should be considered in the differential diagnosis of fever with altered sensorium.

REFERENCES