

Organic Mania in Dengue

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ABSTRACT

Dengue fever is considered to be one of the major health problems in south east Asia. In the recent past, epidemic outbreaks of Dengue have also been noticed in India. Initially, the neurological manifestations which were associated with Dengue received little attention, but now, there have been

several reports of encephalitis and encephalopathy. However, nowhere in the literature has Dengue fever been mentioned as a cause of acute psychosis or mania. Here, we are reporting a 21-year-old male, a resident of Delhi, India who after the Dengue infection, developed an episode of classical mania.

Key Words: Fever, Organic Mania, Psychosis, Mania

INTRODUCTION

Dengue fever is considered to be one of the major health problems in south east Asia. In the recent past, epidemic outbreaks of Dengue have also been noticed in India [1]. Initially, the neurological manifestations which were associated with Dengue received little attention, but now, there have been several reports of encephalitis and encephalopathy [2,3]. However, nowhere in the literature has Dengue fever been mentioned as a cause of acute psychosis or mania.

CASE HISTORY

Here, we are reporting a 21-year-old male, a resident of Delhi, who after an attack of Dengue fever, developed an episode of classical mania.

He was referred to the Psychiatry Department with a history of overactivity, excessive talking, argumentativeness, extreme irritability, grandiosity, abusiveness and a decreased need for sleep of 4 days duration. Six days prior to the onset of the psychiatric illness, he developed fever (40.3°C) which was associated with severe headache, confused behaviour, generalized body ache, anorexia and occasional vomiting. There was no history of neck rigidity, photophobia, seizure and concealed or overt bleeding. His physical examination did not reveal any neurological deficit. The patient's BP was 120/70 mm Hg. His pulse rate was 110 per minute and his urine output was 1 litre/day. Investigations which were done on the 4th day of the fever, revealed a positive serological test for the IgM antibodies, a platelet count of 20,000 per microlitre and a TLC- of 4300/mm³ with 43% lymphocytes. The blood electrolytes, blood sugar, the lipid profile and the renal function tests were within the normal range. The liver function tests were also normal, except for the SGOT and SGPT values of 233 IU/ml and 348 IU/ml. His blood smear revealed no malarial parasite. His prothrombin time was 13 seconds, but his bleeding time had increased (8 minutes). He was diagnosed as a case of Dengue fever with thrombocytopenia. The patient received 2 units of platelet concentrates as transfusion and was kept under observation, with no other specific therapy being given.

On the 6th day of the illness, the patient exhibited manic symptoms, as has been mentioned above. His past, personal and family histories were noncontributory. His mental status examination revealed an increased psychomotor activity, pressure of speech, an irritable mood, a delusion of grandiosity and grade 1 insight. His score on the Young Mania Rating Scale (YMRS) [4] was 27. His Mini Mental State Examination revealed no cognitive impairment, with a score of 27/30. The CT scan of his head was found to be normal. He was treated successfully with carbamazepine 600 mg/day and haloperidol 15-mg/day. The subsequent investigations which were conducted on day 14 of his admission were within normal limits.

DISCUSSION

The patient was diagnosed as a case of mood disorder with manic features, according to DSMIV-TR (293.83) [5]. This case developed the Dengue infection during an epidemic outbreak in Delhi in 2009 [1]. The emergence of manic symptoms in the absence of risk factors such as a personal and a family history of bipolar illness or cyclothymia and an onset after Dengue fever, suggests an organic condition which is responsible for mania. His history and his vital signs and investigations were not suggestive of shock. His delirious behaviour seemed to suggest transient cerebral hypoxia, which could have caused the organic mania.

A systematic study is needed to find out the prevalence of the comorbid psychiatry disorders in Dengue fever, as it is a major health problem in many parts of Asia.

REFERENCES

- [1] Singh NP, Jhamb R, Agarwal SK, Gaiha M, Dewan R, Daga MK, et al. The 2003 outbreak of Dengue fever in Delhi, India. *Southeast Asian J Trop Med Public Health*. 2005; 36:1174-78.
- [2] Ferreira ML, Cavalcanti CG, Coelho CA, Mesquita SD. Neurological manifestations of dengue: study of 41 cases. *Arq Neuropsiquiatr*. 2005;63:488-93.
- [3] Palma-da Cunha-Matta A, Soares-Moreno SA, Cardoso-de Almeida A, Aquilera-de Freitas V, Carod-Artal FJ. *Neurological complications arising from dengue viral infection Rev Neurol*. 2004;39:233-37.

[4] Young RC, Biggs JT, Ziegler VE, Meyer DA. A rating scale for mania: Reliability, validity and sensitivity. *Br J Psychiatry*. 1978;133:429-35.

[5] American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text Revision (DSM-IV-TR). American Psychiatric Association: Washington DC; 2000 ; 345-428.

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FINANCIAL OR OTHER COMPETING INTERESTS:

None.

Date of Submission: **Jul 28, 2012**
Date of Peer Review: **Oct 22, 2012**
Date of Acceptance: **Nov 05, 2012**
Date of Publishing: **Mar 01, 2013**