

A Rare Case of Thoracic Subdural Hematoma after Recovery from Dengue Fever

Sir,

Dengue hemorrhagic fever can present with serious neurological manifestation consequent to coagulation disorders including thrombocytopenia and can involve any organ of the body.^[1] Thrombocytopenia can affect the neuroaxis secondary to vascular leakage.^[2] Here, we report a rare case of dengue fever with dorsal spinal subdural hematoma.

A female patient of 54 years presented with the history of short febrile illness of 4 days with serum hemoglobin of 11.2 g/dL, a total leukocyte count of 11,400/mm³ and a platelet count (PC) of $60 \times 10^9/L$. In view of an ongoing dengue outbreak, the possibility of dengue fever was considered at this juncture. The patient was hemodynamically stable with a pulse rate of 70 beats/min and blood pressure of 112/76 mmHg. Serum dengue nonstructural protein 1 antigen and dengue-specific IgM antibody came positive. Management ensued based on the existing national guidelines for the management of dengue fever with the emphasis on maintaining the fluid and electrolyte balance and clinical parameter monitoring.^[3] Investigations after 2 days showed progressive decrease in PC ($20 \times 10^9/L$). The patient was transfused 2 units of single donor platelets (SDPs), and a repeat PC was found to be $70 \times 10^9/L$. On 9th day, she developed low back ache with sudden onset of bilateral lower limb numbness and paresthesia. This was associated with inability to get up from the lying position/inability to walk and progressed further to complete paraplegia over 6–12 h.

Magnetic resonance imaging (MRI) of the spine revealed a subdural hematoma with severe cord compression at T6–T12 level [Figure 1a and b]. MRI of the brain was

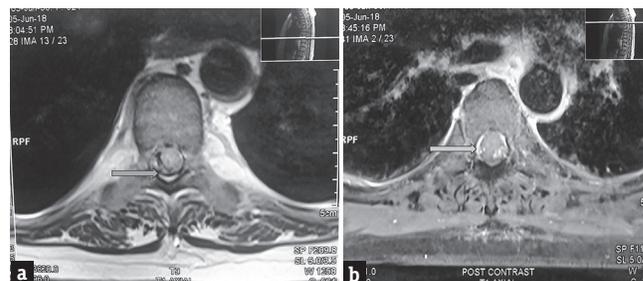


Figure 1: (a) Precontrast magnetic resonance imaging dorsal spine axial section showing area of hypointensity within the subdural space. (b) postcontrast images showing heterogenous enhancement within the subdural space on T1 axial sequence indicating hemorrhage/blood degradation products

normal. Her coagulation parameters were within normal limits. The patient underwent T6–T12 laminectomy for the evacuation of subdural hematoma. Intraoperative blood loss was about 2.0 L, and she was transfused four units of packed red blood cell and two units of SDP. Motor power improved postoperatively from 1/5 to 2/5 and was discharged on the 21st day of illness.

Dengue fever presentation can vary from a self-limiting course to a hemorrhagic manifestation leading finally to a fatal condition with multiple organ failure, i.e., dengue shock syndrome (DSS).^[1] CNS involvement in dengue fever has the incidence of less than 1% which may include encephalopathy, intracranial hemorrhages (subdural and subarachnoid), encephalitis^[4,5] Central diabetes insipidus with diffuse cerebral hemorrhages with no evidence of thrombocytopenia, has been reported.^[1]

Cord ischemia and myelitis can lead to acute rapidly progressive quadriplegia caused by epidural hematoma

resulting in cord compression at the dorsal level.^[4] Presentation of paraplegia due to neuraxial involvement resulting from a hemorrhagic complication may be delayed, as was observed in our case. Mahale *et al.* reported a similar case when their patient following recovery from DSS presented with delayed intracranial subdural hematoma.^[5]

DHF involving the CNS can have a varied manifestation which warrants every clinician to be vigilant in diagnosis and management so as to prevent life-threatening morbidity and mortality.

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Conflicts of interest

There are no conflicts of interest.

Shalendra Singh, Deepak Dwivedi¹, Navdeep Sethi, Debashish Paul

Department of Anaesthesia and Critical Care, Armed Forces Medical College, ¹Department of Anaesthesia and Critical Care, Command Hospital (Southern Command), Armed Forces Medical College, Pune, Maharashtra, India

Address for correspondence: Dr. Deepak Dwivedi, Department of Anaesthesia and Critical Care, Command Hospital (Southern Command) Armed Forces Medical College, Pune - 411 040, Maharashtra, India. E-mail: deepakdwivedi739@gmail.com

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