Rare cause of Guillain-Barré Syndrome: Japanese encephalitis

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ABSTRACT

Introduction: Guillain-Barré syndrome (GBS) is an acute inflammatory demyelinating radiculopathy which may be triggered by infection and Japanese Encephalitis (JE) virus infection is one of the rare provoking agents. **Methods:** We report a 36-year-old male who presented with acute ascending paralysis preceded by JE virus infection. **Results:** This is a case of a 36-year-old man, who presented with acute onset of ascending weakness preceded by fever, headache and altered mental status. On examination, he was febrile, tachycardic and drowsy. He was also tetraparesis with lower limbs worse than upper limbs. Knees and ankles reflexes were absent. Cranial nerves, upper limbs reflexes and sensory examination were unrevealing. Initial Computed Tomography (CT) of the brain was unremarkable. He was empirically treated as meningoencephalitis and intravenous ceftriaxone and intravenous acyclovir were administered. His condition deteriorated and requiring mechanical ventilation following days owing to impending respiratory failure. Cerebrospinal fluid analysis revealed albumino-cytological dissociation while neurophysiological studies suggestive of acute motor axonal neuropathy. Magnetic Resonance imaging of whole spine showed nerve root enhancement of the cauda equina. His CSF JE IgM was positive. This prompted diagnosis of GBS associated with JE infection and intravenous immunoglobulin were commenced. Despite initial improvement of his limb strength and mental status, he suffered recurrent bouts of nosocomial infections resulting in cardiorespiratory arrest leading to severe hypoxic ischaemic injury. Conclusion: This case highlights JE as one of the provoking microorganisms for the GBS. Early detection will assist the public health surveillance to prevent the spread of this vector borne disease.