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SCIENTIFIC LETTER

An Unusual Manifestation of a Common Tropical Infection

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To the Editor: A 15-y-old girl presented with acute onset high-grade fever associated with chills and rigor for 3 d. There was no history of cough, sore throat, burning micturition, pain abdomen, headache, or any other complaints. Examination revealed purple-colored, non-pruritic rashes over face, extremities, and trunk and an eschar over the right leg. Rest of the examination was normal. Investigations revealed thrombocytopenia and mildly elevated transaminase. Serological tests revealed high *Orientia tsutsugamushi* IgM antibody titers. Workups for other tropical illnesses were non-contributory. A diagnosis of scrub typhus was made and she was started on intravenous ceftriaxone. She became afebrile within 2 d, but after one week she developed holocranial, progressively worsening headache, vomiting, and blurring of vision. She had bilateral grade-4 papilledema and bilateral 6th cranial nerve palsy. Magnetic resonance imaging of the brain showed tortuous and distended optic nerve sheaths and partial empty sella, without any parenchymal abnormalities. The cerebrospinal fluid examination was normal except elevated opening pressure (60 cm of water). A diagnosis of idiopathic intracranial hypertension (IIH) was made and she was started on acetazolamide.

The exact cause of IIH is not fully understood, but certain viruses and other microorganisms and medications may play a role in triggering the condition. These microorganisms are believed to initiate an immune response in the central nervous system, leading to inflammation and increased intracranial pressure [1]. Scrub typhus is a common tropical infection and reported nervous system manifestations include meningoencephalitis, encephalopathy, cerebellitis, cerebral infarction, cranial nerve palsies, acute disseminated encephalomyelitis, transverse myelitis, and Guillain Barre syndrome [2–4]. IIH has not been reported so far with scrub typhus infection. There is a wide geographic presence of scrub typhus in India, hence, sensitizing clinicians regarding the myriad of presentations is of utmost importance. It is imperative to suspect scrub typhus among other tropical febrile illnesses and to start specific treatment at the earliest to decrease morbidity and mortality.

Declarations

Conflict of Interest None.

References

1. Wakerley BR, Mollan SP, Sinclair AJ. Idiopathic intracranial hypertension: ipdate on diagnosis and management. Clin Med Lond Engl. 2020;20:384–8.
2. Kim DE, Lee SH, Park KI, Chang KH, Roh JK. Scrub typhus encephalomyelitis with prominent focal neurological signs. Arch Neurol. 2000;57:1770–2.
3. Karanth SS, Gupta A, Prabhu M. Pure cerebellitis due to scrub typhus: a unique case report. Trop Doct. 2013;43:41–2.
4. Kim JH, Lee SA, Ahn TB, et al. Polyneuropathy and cerebral infarction complicating scrub typhus. J Clin Neurol. 2008;4:36–9.

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