Correspondence

A Case of ADEM following Chikungunya Fever

Sir,

Recently, an outbreak of Chikungunya fever has been reported from South Indian states.1 Few neurological complications like meningoencephalitis, myelopathy, neuropathy, retinopathy and optic neuritis are reported with Chikungunya fever, in recent epidemics.2,3 We had a case of Acute Disseminated Encephalomyelitis (ADEM) following Chikungunya fever during the epidemic.

A 45 year old male from North Kerala had fever and, pain and swellings of joints during the outbreak of Chikungunya fever in that area. He was treated conservatively and symptoms subsided in one week. Six days after subsiding of fever, the patient developed rapidly progressive quadriplegia and slurring of speech. The weakness progressed over 2 days and patient became bedridden. There was no alteration in sensorium or seizures. Examination on the second day of illness revealed, asymmetrical UMN quadriplegia with sustained ankle and patellar clonus. His speech was slurred and facial reflexes were exaggerated. He also had dystonic posturing of right upper limb. Investigation showed normal haemogram and routine blood tests, except high ESR (90). Ig M Chikungunya (by ELISA capture assay) was positive. CSF examination showed mild elevation in protein with normal cells. MRI brain with screening of cervical spine was done. It showed focal hyperintense signal on axial T2 weighted and coronal FLAIR images in bilateral fronto-parietal (thin black arrow), temporal (thick black arrow) and occipital (thin white arrow) white matter and bilateral gangliocapsular region (thick white arrow). He was treated with IV methyl prednisolone for 3 days. Patient showed significant improvement in power and was ambulant independently at the time of discharge (after 12 days of admission).

In our patient, a diagnosis of Chikungunya was made from clinical history and positive serology. Our patient developed a rapidly progressive quadriplegia after few days of subsiding the fever. His MRI showed multiple white matter lesions and he improved remarkably with methyl prednisolone. His clinical picture, MRI findings and response to treatment are consistent with ADEM. The development of clonus within 2 days of neurological illness and dystonic posturing of upper limb observed in this case, are unusual for typical postinfective ADEM.

So in conclusion, our case of ADEM following Chikungunya fever is a rare, interesting association and has got some unusual features from typical ADEM.

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Fig. 1 : MRI brain shows focal hyperintense signals on axial T2 weighted and coronal FLAIR images in bilateral fronto-parietal (thin black arrow), temporal (thick black arrow) and occipital (thin white arrow) white matter and bilateral gangliocapsular region (thick white arrow).