Hyperkinetic Movement Disorder in a Girl with Anti-NMDA Receptor Encephalitis

An 8-year-old girl previously in good health presented with history of five days of acute onset confusion, impaired speech, lack of sleep, two episodes of brief generalized seizures and involuntary movements. On examination, she was completely unaware, agitated, and mute. She had peculiar repetitive, rapid, eyelid, ocular and oro-facial dyskinesias, accompanied with continuous choreo-athetoid movements (***Fig. 1*** *and* ***Web*** **Video 1**). Neuroimaging was normal. Cerebrospinal fluid was acellular with normal proteins and sugar. A diagnosis of Anti-N-methyl-D-aspartate (anti-NMDA) receptor encephalitis was confirmed by demonstration of CSF anti-NMDA receptor antibodies. She was initiated on methylprednisolone (30 mg/kg/day for 5 days) and intravenous immunoglobulins pulse (1g/kg, for 2 days). She responded remarkably to treatment with cessation of all movement abnormalities and full recovery of consciousness, speech, cognition and sleep pattern. She started attending regular school after a month of treatment.

In anti-NMDA receptor encephalitis, oro-lingual-facial dyskinesias are the most characteristic movement abnormality. This movement disorder frequently occurs along with limb and trunk choreoathetosis, oculogyric crisis, dystonia, rigidity, and opisthotonic postures. This pattern of movement disorder is important to recognize because this disorder is a treatable cause of severe neuro-morbidity. Resembling movements disorders can occur in children due to drugs or toxins, basal ganglia involvement in viral encephalitis, Syndenham chorea, neurometabolic disorders, or hypoxic/ischemic insult to the basal ganglia. Symptomatic treatment of the hyperkinetic movement disorder may be difficult but drugs like valproate, haloperidol, benzodiazepines, and tetrabenazine have been tried.

FIG. 1 *Movement disorder in anti-NMDA receptor encephalitis. (See video at website).*

Acknowledgement: Dr Josep Dalmau (Research Professor ICREA-IDIBAPS, Service of Neurology, Hospital Clínic, University of Barcelona) for his help in diagnosis of this child.

RENU SUTHAR, NAVEEN SANKHYAN AND *PRATIBHA SINGHI
Department of Pediatrics, Advance Pediatric Center, PGIMER, Chandigarh, India.
**doctorpratibhasinghi@gmail.com.*

NOTICE

Call for Submission of 'Clinical Videos'

Under this section, *Indian Pediatrics* publishes videos depicting an intricate technique or an interesting clinical manifestation, which are difficult to describe clearly in text or by pictures. A video file submitted for consideration for publication should be of high resolution and should be edited by the author in final publishable format. MPEG or MP4 formats are acceptable. The maximum size of file should be 20 MB. The file should not have been published elsewhere, and will be a copyright of *Indian Pediatrics*, if published. For this section, there should be a write-up of up to 250 words discussing the condition and its differential diagnoses. The write up should also be accompanied by a thumbnail image for publication in the print version and PDF. Submit videos as separate Supplementary files with your main manuscript. A maximum of three authors (not more than two from a single department) are permissible for this section. In case the video shows a patient, he/she should not be identifiable. In case the identification is unavoidable, or even otherwise, each video must be accompanied by written permission of parent/guardian, as applicable. Authors are responsible for obtaining participant consent-to-disclose forms for any videos of identifiable participants, and should edit out any names mentioned in the recording. The consent form should indicate its purpose (publication in the journal in print and online, with the understanding that it will have public access) and the signed consent of the parent/legal guardian. The copy of the consent form must be sent as supplementary file along with the write-up, and original form should be retained by the author. A sample consent form is available at our website *www.indianpediatrics.net.*