Unusual Cause of Intractable Vomiting in a Young Girl

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Received: 7 September 2018 / Accepted: 30 November 2018 / Published online: 12 January 2019

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To the Editor: The etiology of recurrent vomiting in children is diverse and includes gastrointestinal, neurological and metabolic causes. We report an unusual cause of intractable vomiting in a young girl.

A 4-y-old girl presented with vomiting for 3 mo and weight loss (4 kg). There was no fever, headache, diminution of vision, dysphagia or poor appetite. On examination, she was emaciated with weight for height less than-3 standard deviation (SD). Vitals and systemic examinations were normal. Neurological examination revealed bilateral extensor planter reflexes. The routine blood investigations including liver function tests, USG abdomen and upper gastrointestinal endoscopy were normal.

MRI brain revealed patchy congruent areas of altered signal intensity and involving inferior medullary region, cervicomedullary junction and proximal spinal cord. Cerebrospinal fluid (CSF) analysis was normal. Blood serology was positive for aquaporin-4 IgG. Based on MRI findings and child's presentation a diagnosis of Neuromyelitis Optica Spectrum Disorder (NMOSD) was made.

She was treated with intravenous pulse methylprednisolone therapy followed by oral steroids. Intravenous Rituximab was given along with CD19 levels monitoring to prevent relapse. Child responded to therapy and is currently doing well in follow up.

NMO is an autoimmune demyelinating disorder of the central nervous system with specific predilection to spinal cord and optic nerves [1]. With emerging data on the specificity of aquaporin-4 (AQP-4) seropositivity, a new unifying term

Neuromyelitis Optica Spectrum Disorder (NMOSD) was introduced to classify patients based on presence or absence of seropositivity [2].

Other than typical presentations like visual loss, severe symmetric paraplegia/paraparesis, patient with NMO may present with unusual symptoms like nausea, intractable vomiting, hiccups or severe neurogenic respiratory failure attributed to brain stem and area postrema involvement [3]. Apiwattanakul et al. and Bramson et al. also have reported similar cases with NMOSD who presented with only vomiting and were seropositive for AQP-4 IgG [4, 5]. Hence, AQP-4 IgG is very specific for making the diagnosis of NMOSD in the presence of suggestive clinical features. This case highlights the importance of considering this treatable and potentially disabling condition in children with intractable vomiting.

Compliance with Ethical Standards

Conflict of Interest None.

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