

TEACHING FILES (GRAND ROUNDS)

RECURRENT VOMITING

Himali Meshram.

Pediatric Gastroenterology and Hepatology Unit, Apollo Clinics, Nagpur, Maharashtra, India.

KEYWORDS

Abdominal epilepsy, children, vomiting.

ARTICLE HISTORY

Received 15 June 2021

Accepted 27 July 2021

Clinical Problem

A 3.5-year-old male child presented with recurrent episodes of vomiting (non-bilious, small quantity) for two years. There was no loss of weight, no history of abdominal pain or distension, loss of appetite or fever. Birth and development history was normal. He had neonatal jaundice on third day of life which required phototherapy for two days. He had no history of convulsions. On presentation to us, his weight was 11.6 kg (<3rd percentile), height 99 cm (25-50th percentile). Systemic examination was normal. Investigations showed hemoglobin 11.6 gms/dl, white cell count 9800/cumm (polymorphs 79%, lymphocytes 14%, monocytes 8%), platelets of 550,000/cumm, alanine amino transferase (AST) 26U/L, aspartate amino transferase (ALT) 25U/L. Blood gas analysis, renal function tests and serum electrolytes were normal. Abdominal ultrasound showed non-specific mesenteric lymphadenopathy. Barium study of esophagus and stomach was normal. Gastroscopy was normal. CT abdomen was normal. Child was being treated with cyproheptadine on basis of clinical suspicion of cyclical vomiting. One month later, he had multiple episodes of vomiting with abdominal pain causing severe dehydration. He required intensive care and mechanical ventilation for two days. MRI brain was done to rule out ischemic damage to brain which showed signs of perinatal hypoxic ischemic damage. An EEG was performed which showed epileptiform discharges in occipital lobe. He was started on flunarizine. After starting treatment, he is on regular follow up and has no further episodes of vomiting.

What is the diagnosis?

Discussion

Abdominal epilepsy (AE). It is a rare disorder in which various gastrointestinal complaints including abdominal pain, nausea, vomiting result from seizure activity.¹ It is characterized by paroxysmal episodes of gastrointestinal complaints, definite electroencephalogram (EEG) abnormalities, and good response to antiepileptic drugs (AED) According to International League Against Epilepsy, AE are considered as a part of simple or

complex partial seizures.² The pathophysiology of AE remains unclear.^{1,3} A high index of suspicion is needed to make a diagnosis of AE after excluding all other possible causes.³ The patients who have unexplained gastrointestinal complaints with or without central nervous system (CNS) features should be evaluated with EEG and if EEG is abnormal, should be given a trial of anticonvulsant drugs and the response should be carefully looked for. Usually, low dose single drug is required to control the disease.³ Our child had unexplained paroxysms of vomiting. History of aura or post ictal symptoms like exhaustion or sleep were not reported in our child. Past history of febrile seizures, CNS infections and trauma are important histories in case of epilepsy which were not found in our patient.⁴ Patients usually have temporal lobe seizure activity although extratemporal epilepsy has also been reported.⁴ Our child also had abnormal EEG with involvement of occipital lobe. Various neurologic clues such as mental changes are observed along with abdominal complaints though every episode may not be accompanied with neurological symptoms. In our patient, there were less complaints of neurological manifestations.³ For management of AE various drugs have been used like phenobarbital, carbamazepine, phenytoin, and valproic acid but there are no defining recommendations on the drug selection.³ Our patient was started on flunarizine and showed gradual favorable and significant improvement.

Compliance with ethical standards

Funding: None

Conflict of Interest: None

References

1. Mondal R, Sarkar S, Bag T, Mondal K, Saren A. A pediatric case series of abdominal epilepsy. *World J Pediatr.* 2014;10:80-82.
2. Mpondo BC, Mwasada G, Nyundo AA. Abdominal epilepsy, an uncommon cause of chronic and recurrent abdominal pain: a case report. *Clin Case Rep.* 2016;4:1117-1119.
3. Jagtap SS, Wingkar KC, Aundhkar C, Boral S, Jagtap SV. Role of EEG in Diagnosing Abdominal Epilepsy Patients. *J Clin Diagn Res.* 2018;12:CC05-CC07.
4. Kshirsagar VY, Nagarsenkar S, Ahmed M, Colaco S, Wingkar KC. Abdominal epilepsy in chronic recurrent abdominal pain. *J Pediatr Neurosci.* 2012;7:163-166.

Address for Correspondance: Dr Himali Meshram

401, Shivam Apartment, Manish Nagar, Nagpur,

440015, Maharashtra, India.

Email: gshimali@yahoo.com

©2021 Pediatric Oncall