
LETTER TO EDITOR (VIEWERS CHOICE)

A RARE CASE OF CYCLIC VOMITING IN A YOUNG CHILD

Anjali Bharani, Anchala Dixit**, Swati Raipurkar**

Keywords : child, cyclic, vomiting

An eleven year male child presented with repeated episodes of vomiting along with abdominal pain over last 6 years. Every time it started with abdominal pain progressing to severe, multiple episodes of non-bilious vomiting lasting a week. Each time he had hyponatremia with hypokalemia attributable to severe vomiting. The symptoms used to subside after treatment with intravenous fluids and anti-emetics. In between such episodes, he remained completely normal. On examination, his weight was 25 kg and had an emaciated look along with pallor. Other general and systemic examination was normal. His complete blood count, liver and renal function tests, urine examination, urine electrolytes, urine for porphobilinogen, stool

examination, serum IgE levels, ultrasonography with colour doppler abdomen, contrast enhanced CT abdomen, barium meal, CT Brain, EEG were normal. Upper GI endoscopy detected a small 2 cm hiatus hernia, for which his laparotomy and fundoplication was also done a year ago. However the symptoms continued to recur even then. A clinical psychologist assessment confirmed it as cyclic vomiting syndrome (CVS). He was put on behavioral modification therapy, family therapy and cyproheptadine. He showed improvement in behavior and symptoms. He was advised to maintain a vomiting diary, avoid fasting, avoid sleep deprivation and any probable triggers. No further vomiting episodes have been reported till 3 months on follow up.

CVS is an idiopathic functional vomiting disorder described in children as well as adults. Pediatric CVS has been found to have pathophysiologic associations with migraine, mitochondrial disorders, and neuroendocrine abnormalities. The most common misdiagnosis are gastroenteritis, intermittent volvulus/malrotation, food poisoning, gastro-esophageal reflux disease, which often lead to delay in reaching correct diagnosis and exhaustive work-up. Although the exact prevalence of CVS is unknown, estimates in two recent studies of white children aged 5–15 reported a prevalence of 2%. (1,2) CVS is characterized by four phases: prodromal phase followed by emetic phase, recovery phase and finally inter-episode phase of wellness. (3,4) At present, there are no specific tests for diagnosing CVS, and the diagnosis rests upon fulfilling clinical criteria proposed by North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN): at least 5 episodes overall or a minimum of 3 episodes noted in a 6-month period; recurrent attacks of vomiting and nausea lasting 1 hour to 10 days and occurring at least 1 week apart; stereotype of symptoms and episodes; vomiting during episodes occurring at least 4 times per hour for at least 1 hour; returning to baseline health between episodes; and not being attributable to another disorder. (5) Current treatment for CVS can be divided into supportive therapy during episodes and prophylactic therapy during the inter-episodic period which includes avoidance of identified triggers, lifestyle changes and psychological interventions. Therapeutic drug options include cyproheptadine, tricyclic antidepressants, anti-migraine drugs like propranolol, flunarizine. In the natural history of CVS, it has been seen that most outgrow this debilitating disorder with time, though some will transition to migraine headaches and even continue to suffer CVS as adults. (6)

Funding : None

Conflict of Interest: None

References :

1. Abu-Arafeh I, Russel G. Cyclic vomiting syndrome in children: a population based study. *J Pediatr Gastroenterol Nutr.* 1995; 21:454–458
2. Ertekin V, Selimoglu MA, Altnkaynak S. Prevalence of cyclic vomiting syndrome in a sample of Turkish school children in an urban area. *J Clin Gastroenterol.* 2006; 40:896–898.
3. Prakash C, Staiano A, Rothbaum RJ, Clouse RE. Similarities in cyclic vomiting syndrome across age groups. *Am J Gastroenterol.* 2001; 96:684–688.
4. Fleisher DR, Gornowicz B, Adams K, Burch R, Feldman EJ. Cyclic vomiting syndrome in 41 adults: the illness, the patients, and problems of management. *BMC Med.* 2005; 3:20.
5. Li BU, Lefevre F, Chelimsky GG, Boles RG, Nelson SP, Lewis DW, et al. North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. Consensus Statement on the Diagnosis and Management of Cyclic Vomiting Syndrome. *J Pediatr Gastroenterol Nutr.* 2008;47:379-393
6. Pfau BT, Li BU, Murray RD, Heitlinger LA, McClung HJ, Hayes JR. Differentiating cyclic from chronic vomiting patterns in children: quantitative criteria and diagnostic implications. *Pediatrics.* 1996; 97:364–368

From: *Department of Pediatrics and ** Department of Psychiatry, Index Medical College, Hospital & Research Centre, Indore, Madhya Pradesh.

Address for Correspondence:
Anjali Bharani, Department of Pediatrics, Index Medical College, Hospital & Research Centre, Indore, Madhya Pradesh.



Email : dr.anjalibharani@gmail.com

DOI: 10.7199/ped.oncall.2018.24
