

# Cyclic Vomiting Syndrome

*Thangam Venkatesan, MD and Erica A. Samuel, MD*

## KEY POINTS

- Cyclic vomiting syndrome (CVS) is a chronic functional disorder of unknown etiology and is characterized by stereotypic episodes of nausea and vomiting.
- CVS occurs in both children and adults and affects mostly whites in North America.
- Diagnosis is made with Rome III criteria in adults and North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) criteria in children.
- CVS is associated with high rates of health care utilization and poor quality of life.
- Use of tricyclic antidepressants (TCAs) as prophylactic agents in adults and cyproheptadine in children <5 years of age is effective in controlling symptoms.

## DEFINITION

Cyclic vomiting syndrome (CVS) is a chronic functional disorder characterized by episodes of severe nausea and vomiting that alternate with symptom-free intervals.<sup>1</sup> Symptoms are often triggered by social stress; episodes can occur after the loss of a loved one, job-related stress, during exams, and even on vacations.<sup>2</sup> The etiology of CVS is not known, but several theories have been proposed, including genetic factors in children and marijuana use in adults. Patients also have many associated conditions, including a history of migraine and autonomic dysfunction and high rates of anxiety and depression.

While CVS is generally not life threatening, it is associated with significant morbidity. Many patients are often misdiagnosed as having viral gastroenteritis, gastroparesis, or even psychogenic vomiting given the lack of awareness in the medical community.<sup>3</sup> Approximately 20% of patients are subjected to surgical procedures such as cholecystectomies and appendectomies that fail to improve their symptoms. Affected adults also have multiple emergency department visits and hospitalizations for relief of symptoms, which pose a significant economic burden on limited health