

Cyclic Vomiting Syndrome in Adults

David R. Fleisher, M.D. Associate Professor of Pediatrics - GI, University of Missouri, Columbia, Co-founder, CVSA-USA/Canada

The first description of CVS in the English language was written by Dr. Gee in 1882. He reported a series of patients, all of whom were children ranging in age from infancy to nine years. Thereafter, CVS was considered a pediatric disorder and, to this day, most internists and gastroenterologists whose practices are limited to adults continue to be unaware of it. Making a diagnosis of CVS is difficult because it is a "functional" disorder. The simplest example of a functional disorder is a runner's leg cramp; the cramped muscle is not diseased, no blood tests or x-rays would show abnormalities and the pain certainly is not "all in the head." It is real even though medical tests designed to detect disease don't find any. In functional disorders, suffering is caused by healthy organs which function in ways that cause symptoms, but that are not diseased. Therefore, CVS cannot be diagnosed by blood tests, x-rays, or other technologic means. The diagnosis is made by a knowledgeable physician who elicits a history from the patient typical of CVS.

The past decade has seen a resurgence of interest in CVS, largely as a result of the work of CVSA and its members. Unfortunately, the fact that CVS affects adults as well as children is still largely unknown. The fourteenth addition of Harrison's "Principles of Internal Medicine" (1998) is a textbook with more than 2500 pages; it mentions the vomiting that accompanies migraine headaches and motion sickness, but does not mention CVS. Over the past 35 years, I've provided care to 233 patients with CVS, 43 of whom were adults. My oldest patient is 69 years old and had her first episode in her early 40's. The histories related by most of my adult patients are characterized by years or decades of either insufficient treatment (such as being given IV fluids in emergency rooms and then sent home still sick) or ill-advised surgeries that did not help (such as fundoplication, gallbladder removal, or operations to facilitate emptying of the stomach). When "nothing seems to work," physicians sometimes give up or get tired of not being able to cure the patient who has repeated episodes of awful suffering. Patients then begin to feel hopelessly out of control of their illness and become anxious.

Most CVS patients can identify circumstances that tend to trigger the onset of some or many of their episodes. In children, common triggers include colds, flu, sinusitis, fatigue, motion sickness, asthma attacks and menstrual periods. But the commonest triggers in children are heightened emotional states, either stressful or exciting. Discerning triggering factors is useful because, if the identified triggers can be removed or ameliorated, the CVS episodes may be prevented or aborted more easily.

I have been struck by the fact that the majority of adult CVS patients are prone to anxiety. Many of them have anxiety or panic attacks. Ordinarily, such attacks usually come and go within minutes or hours. But with many adult CVS patients, anxiety attacks set off CVS episodes that then go on for 2 to 4 days. Panic attacks come on suddenly, "out of the blue," night or day. A diagnosis of panic attack can be made if 4 or more of the following 13 symptoms occur and reach peak intensity within ten minutes: heartbeats that are fast, irregular or "pounding;" profuse sweating; chills

and/or hot flashes; trembling or shivering; nausea and/or abdominal pain; chest pain or discomfort; dizziness or light headedness; feeling as though one can't get a good breath; a choking sensation; numbness or "pins-and-needles" feelings; a feeling of unreality or detachment; a fear of losing control; and a fear of dying. During panic attacks, the autonomic nervous system becomes very over-active.

The autonomic nervous system is that part of our nervous system that controls bodily functions that we ordinarily have no voluntary control over, such as our heart beat, sweat gland activity, and the actions of our stomach. It would be a mistake to think about CVS as either a mental or physical disorder. The whole person is affected. We can conceptualize human beings as being separable into a mental/psychological part and a physical part, but in reality, each of us is an indivisible being. No disturbance in our emotional lives occurs without physical changes and no physical distress can reach our awareness without accompanying emotional changes. Some of the typical coping measures that CVS patients employ not only seem to help with nausea, but also counteract the intense anxiety that underlies and is caused by nausea. Examples of these measures include "hydrotherapy" in the form of prolonged baths or showers, pacing about, attempting to smoke, and the use of marijuana.

When individuals feel anxious, they may be aware of their physical discomfort, but entirely unaware of what is setting it off. The patient and the physician may then embark on a fruitless search for diseases that might be causing the physical symptoms. The stress of further diagnostic testing may even make the underlying, unrecognized anxiety worse. An important part of management in anxiety-prone CVS patients is helping them recognize mounting anxiety when it occurs so that they might combat it and keep it from triggering a CVS episode. My clinical impression is that Zofran, an otherwise excellent anti-nausea medication, may not work well in some patients with nausea that is principally driven by intense anxiousness. There is another kind of nausea and vomiting that affects many adults with CVS. I call it "dyspeptic nausea." It consists of brief bouts of nausea, with or without vomiting, that come and go during the day. For example, an individual may wake up at the usual time, feel nauseated, vomit, and after an hour or less feel well enough to go to work or school. Or, one might develop nausea while at a dinner party, excuse oneself, vomit in the bathroom or just walk about outside "for some fresh air," and then feel better. Bouts of dyspeptic nausea are not CVS episodes, although, they may sometimes trigger episodes. Dyspeptic nausea is also anxiety driven, although the individual may be entirely unaware of being tense or anxious. Its occurrence points to a possibly effective method of treatment, such as anti-anxiety medications and/or therapy.

Treatment of CVS in patients who are anxiety prone isn't easy; there is no sure-fire method that works for everyone. Treatment within a doctor-patient relationship that is collaborative, dedicated and not defeated by failure is infinitely better than no treatment at all or mistreatment. I am very encouraged by the work of Yvette Taché and other scientists who are working on the biology of the autonomic link between our emotions and our gastrointestinal functions. The day is coming when CVS will be easily recognized because it will be easily cured.