Cyclic Vomiting Syndrome

In cyclic vomiting syndrome (CVS), people experience bouts or cycles of severe *nausea* (feeling sick to your stomach) and vomiting that last for hours or even days. Bouts of nausea and vomiting alternate with longer periods of no symptoms. CVS occurs mostly in children, but the disorder can affect adults. CVS has no known cause. Each episode is similar to the previous ones. The episodes tend to:

- Start at about the same time of day.
- Last the same length of time.
- Present the same symptoms at the same level of intensity.

CVS can begin at any age in children and adults. CVS usually starts between the ages of 3 and 7. In adults, episodes tend to occur less often than they do in children, but they last longer. Furthermore, the events or situations that trigger episodes in adults cannot always be pinpointed as easily as they can in children.

THE FOUR PHASES OF CVS

- Prodrome.
- Episode.
- Recovery.
- Symptom-free interval.

The **prodrome** phase signals that an episode of nausea and vomiting is about to begin. This phase can last from just a few minutes to several hours. This phase is often marked by belly (*abdominal*) pain. Sometimes taking medicine early in the prodrome phase can stop an episode in progress. However, sometimes there is no warning: a person may simply wake up in the morning and begin vomiting.

The **episode** phase consists of:

- Nausea and vomiting.
- Paleness.
- An inability to eat, drink or take medicines without vomiting.
- Drowsiness and exhaustion.

The **recovery** phase begins when the nausea and vomiting stop. Healthy color, appetite and energy return.

The **symptom-free interval** phase is the period between episodes when no symptoms are present.

TRIGGERS

Episodes can be triggered by an infection or event. Another trigger, often found in children, is emotional stress or excitement, often from a birthday or vacation, for example. Other reported triggers include:

- Colds, allergies, sinus problems and the flu.
- Eating certain foods such as chocolate or cheese.
- Eating too much.
- Eating just before going to bed.
- Hot weather.
- Physical exhaustion.
- Menstruation.
- Motion sickness.

SYMPTOMS

The main symptoms of CVS are:

- Severe vomiting.
- Nausea.
- Gagging (*retching*).

Episodes usually begin at night or the first thing in the morning. Episodes may include vomiting or retching up to 5 or 6 times an hour during the worst of the episode. Episodes usually last anywhere from 1 to 4 days. Episodes can last for up to 10 days.

Other symptoms include:

- Pallor.

- Exhaustion.
- Listlessness.

Sometimes the nausea and vomiting are so severe that a person appears to be almost unconscious. Sensitivity to light, headache, fever, dizziness, diarrhea and abdominal pain may also accompany an episode. In addition, the vomiting may cause drooling and excessive thirst. Drinking water usually leads to more vomiting, though the water can dilute the acid in the vomit, making the episode a little less painful. Continuous vomiting can lead to *dehydration*, which means that the body has lost excessive water and salts.

DIAGNOSIS

CVS is hard to diagnose because no clear tests, such as a blood test or x ray, exist to identify it. A caregiver must diagnose CVS by looking at symptoms and medical history. A caregiver must exclude more common diseases or disorders that can also cause nausea and vomiting. Also, diagnosis takes time because caregivers need to identify a pattern or cycle to the vomiting.

CVS AND MIGRAINE

The relationship between migraine and CVS is still unclear. Medical researchers believe that the two are related. First, migraine headaches, which cause severe pain in the head; abdominal migraine, which causes stomach pain; and CVS are all marked by severe symptoms that start quickly and end abruptly, followed by longer periods without pain or other symptoms. Second, many of the situations that trigger CVS also trigger migraines. Those triggers include stress and excitement. Third, research has shown that many children with CVS either have a family history of migraine or develop migraines as they grow older.

Because of the similarities between migraine and CVS, doctors treat some people with severe CVS with drugs that are also used for migraine headaches. The drugs are designed to:

- Prevent episodes.
- Reduce their frequency.
- Lessen their severity.

TREATMENT

CVS cannot be cured. Treatment varies, but people with CVS should get plenty of rest and sleep, and take medications that prevent, stop or lessen the vomiting episodes and other symptoms.

Once a vomiting episode begins, treatment is supportive. It helps to stay in bed and sleep in a dark, quiet room. Severe nausea and vomiting may require hospitalization and intravenous fluids to prevent dehydration. Sedatives may help if the nausea continues. Sometimes, during the prodrome phase, it is possible to stop an episode from happening altogether. Only take over-the-counter or prescription medicines for pain, discomfort or fever as directed by your caregiver. **Do not give aspirin to children.**

During the recovery phase, drinking water and replacing lost electrolytes (salts in the blood) are very important. Electrolytes are salts that the body needs to function well and stay healthy. Symptoms during the recovery phase can vary. Some people find that their appetites return to normal immediately, while others need to begin by drinking clear liquids and then move slowly to solid food.

People whose episodes are frequent and long-lasting may be treated during the symptom-free intervals in an effort to prevent or ease future episodes. Medications that help people with migraine headaches are sometimes used during this phase, but they do not work for everyone. Taking the medicine daily for 1 to 2 months may be necessary to see if it helps. The symptom-free phase is a good time to eliminate anything known to trigger an episode. For example, if episodes are brought on by stress or excitement, this period is the time to find ways to reduce stress and stay calm. If sinus problems or allergies cause episodes, those conditions should be treated.

COMPLICATIONS

The severe vomiting that defines CVS is a risk factor for several complications:

- **Dehydration.** Vomiting causes the body to lose water quickly.
- **Electrolyte imbalance.** Vomiting also causes the body to lose the important salts it needs to keep working properly.
- **Peptic esophagitis.** The tube that connects the mouth to the stomach *(esophagus*) becomes injured from the stomach acid that comes up with the vomit.
- **Hematemesis.** The esophagus becomes irritated and bleeds, so blood mixes with the vomit.
- **Mallory - Weiss tear.** The lower end of the esophagus may tear open or the stomach may bruise from vomiting or retching.
- **Tooth decay.** The acid in the vomit can hurt the teeth by corroding the tooth enamel.

CONSULT WITH YOUR CAREGIVER WITH ANY QUESTIONS OR PROBLEMS YOU OR YOUR CHILD HAS.

Document Released: 02/26/2003 Document Re-Released: 01/09/2011
ExitCare® Patient Information ©2011 ExitCare, LLC.