Children's Mercy KANSAS CITY

Know All About It

VOCAL CORD DYSFUNCTION (VCD)

Vocal Cord Dysfunction (VCD) is a condition that is often mistaken for asthma, especially Exercise Induced Asthma. This confusion is made because the symptoms appear asthma-like, and often lead to treatment with use of asthma medications. VCD is actually a result of an abnormal closing of the vocal cords. Since VCD is not asthma, the symptoms do not improve with asthma medications. This may lead to increased dosing of medications, frequent emergency room visits, and even hospitalizations. To add to the complications, many people have a combination of asthma and Vocal Cord Dysfunction.

Children's Mercy

Hearing & Speech Clinic

To schedule an appointment, call the CMH Contact Center at:

816-234-3000
Toll free: 888-239-8152

For questions about this service, call:
913 696-5750
or
816 960-4001

What happens with VCD?

In order to understand Vocal Cord Dysfunction, it is helpful to know how the vocal cords normally function. When you breathe in (inhale), the vocal cords open, allowing air to flow into your windpipe (trachea), and on down into the lungs. The vocal cords remain open as you breathe out (exhale). With VCD, the vocal cords come close together, or even sometimes, close completely during inhalation and/or exhalation. This leaves only a very small opening for air to flow in and out of your lungs. The closer the vocal cords are to being closed, the more difficulty you may have with breathing. Unfortunately, the more difficulty you have with breathing, the harder you may try to breathe. The harder you try, the tighter the vocal cords squeeze together.

VCD Symptoms

Common symptoms for Vocal Cord Dysfunction include:

- Chronic cough
- Shortness of breath
- Difficulty breathing
- Chest tightness
- Throat tightness
- "Difficulty getting air in"
- Increased work of breathing
- Hoarseness
- Wheezing or Stridor (squeaky noise in the throat)
- Feeling faint
- Tingling in the extremities (arms & legs)

Diagnosis of Vocal Cord Dysfunction

VCD is often difficult to diagnose. That is why some people's symptoms are treated as if they had asthma instead of VCD. But, when the common asthma treatments are ineffective, your physician may refer you to a lung specialist at Children's Mercy Hospitals & Clinics in Kansas City, Missouri. Lung specialists include doctors who specialize in pulmonology, asthma and allergy, etc. The physician or health care provider will take an in-depth medical history and ask specific questions about your breathing difficulties. The doctor may also order breathing tests, a chest x-ray, and sometimes an endoscopy. An endoscopy is a special procedure where a small tube (scope) is passed through your nose to look at the vocal cords to see how they open and close. It is best to use the scope procedure when you are having breathing symptoms, because the VCD symptoms do not happen all the time.

Once the diagnosis of VCD is confirmed, your doctor will refer you to the Hearing & Speech Department for a specific treatment program, similar to that which would be used with hyperfunctional voice disorders and aphonia. This approach was first reported to be effective for VCD patients by Blager et.al. (1987 & 1988) of the National Jewish Center for Immunology and Respiratory Medicine & University of Colorado Health Sciences. (www.nationaljewish.org)

What Causes VCD? What Triggers the Symptoms?

Vocal Cord Dysfunction triggers are often similar to asthma triggers. These may include:

- Upper respiratory infections
- Bronchitis
- Pneumonia
- Fumes
- Odors
- Cigarette or other smoke
- Singing
- Emotionally upset
- Post-nasal drip
- Exercise

VCD Treatment Process

The speech-language pathologist (SLP) meets with the patient and family, reviewing the history and documenting the reported breathing difficulties. Then, the SLP discusses the VCD diagnosis and explains the treatment and anticipated outcomes. Treatment is usually initiated in the first session and includes: education regarding the Disorder; learning to recognize symptoms within one's own body; training in correct diaphragmatic techniques; training relaxation of the upper body; and learning to prevent and interrupt VCD events with a "swallow-breathe" technique. The patient is dismissed to home with a "homework" assignment to practice the specialty techniques for one week. Follow up is scheduled in one to two weeks, and the control techniques are fine-tuned, as needed. The patient also learns to use the special breathing techniques during exercise. One to two follow up sessions is usually sufficient to help the patient learn to prevent and/or interrupt the VCD symptoms.