

In 1983, doctors at National Jewish described a condition that may be confused with asthma. This condition is called Vocal Cord Dysfunction, or VCD. People with VCD will report asthma-like symptoms or symptoms resembling an allergic reaction (throat symptoms with trouble breathing) to their doctors.

VCD SYMPTOMS & MISDIAGNOSIS

Symptoms include shortness of breath, wheezing, cough, even chest tightness. These symptoms are a result of an abnormal closing of the vocal cords (VCD) rather than inflammation of their airways (asthma). Based on these symptoms, many people with VCD may be diagnosed with asthma and treated with asthma medications, including oral steroids. Since VCD is not asthma, the symptoms do not improve or only minimally improve with this treatment.

When VCD is not identified, patients are often treated with asthma medications. They may develop significant side effects. These are often seen with long-term use of oral steroids, without much benefit. Incorrect diagnosis and treatment may also lead to frequent emergency room visits and hospitalizations, even intubation. Additionally, patients can often be misdiagnosed with an allergy to foods or other substances and unnecessarily avoid foods or situations. An important factor to be aware of is that some people have a combination of asthma and VCD.

WHAT HAPPENS WITH VCD?

To understand VCD, it is helpful to know how the vocal cords function normally. When you breathe in, or inhale, and out, or exhale, the vocal cords open. This allows air to flow into or out of your windpipe (trachea). However, with Vocal Cord Dysfunction, the vocal cords close together, or constrict, during one or both parts of the breathing cycle. This leaves only a small opening for air to flow through to your windpipe.

HOW IS VCD DIAGNOSED?

Making a diagnosis of VCD can be very difficult. If your doctor suspects VCD, you will be asked many questions about your symptoms. Common symptoms include a chronic cough, chronic throat clearing, shortness of breath, difficulty breathing, chest tightness, throat tightness, difficulty getting air in, hoarseness and wheezing.

Many people with VCD have problems with postnasal drip from chronic nasal and/or sinus congestion or gastroesophageal reflux disease. It appears that these two conditions can lead to chronic irritation of the throat leading to vocal cords being hypersensitive to irritant stimuli.

Breathing tests may be normal and not show signs of asthma. If a patient has spirometry and their doctor obtains a flow volume loop during the test, the flow-volume loop can be helpful in showing VCD. The characteristic finding is a cutting off or fluttering of the aspirator (and/or expiratory) part of the loop. This is only helpful if it is done while you are having symptoms.

A procedure called a laryngoscopy can be useful in making the diagnosis of VCD. This procedure is performed by a specialized doctor. Using a flexible tube with a fiber optic camera, the doctor can see how your vocal cords open and close. A laryngoscopy should be done when you are having symptoms because abnormal vocal cord movements do not occur all the time. Other tests may be done to trigger symptoms so that your doctor can observe your vocal cords when you are having symptoms.

WHAT CAN TRIGGER VCD SYMPTOMS?

Possible triggers of VCD are often similar to asthma triggers. Triggers may include upper respiratory infections, air pollution, strong chemical fumes and odors, mold smells, cigarette smoke, singing, laughing, emotional upset, post-nasal drip, gastroesophageal reflux disease, cold air and exercise. Sometimes the trigger is not known.

HOW IS VCD TREATED?

Once you are diagnosed with VCD, you can begin a specific treatment program. If VCD is your only condition, your asthma medications may be stopped. If you have a combination of asthma and VCD, asthma medications may be continued, but may often be decreased. Treatment for reflux disease and postnasal drip should be started if these are present.

Speech therapy is a very important part of the treatment for VCD. Special exercises increase your awareness of abdominal breathing and relax your throat muscles. This enables you to have more control over your throat. Learning to suppress cough and throat clearing can also be extremely helpful. You will learn to practice these exercises while you are symptom-free in order to effectively use the exercises during VCD episodes. These exercises help overcome the abnormal vocal cord movements and improve airflow into your lungs.

Another important part of treatment is supportive counseling. Counseling can help you adjust to a new diagnosis and a new treatment program. Counseling can also help you identify and deal positively with stress that may be an underlying factor in VCD. Most people with VCD find counseling to be very beneficial.

RELAXED THROAT BREATHING EXERCISE

- » Sip water before and after doing these exercises.
- » Practice 10 breaths, 5-7 times per day when you are NOT having symptoms.
- » Be patient when completing the breathing, as it may take several minutes to start feeling relief.
- » Make it automatic and use it at the first sense of throat tightness to prevent or suppress VCD. You may start with the INHALE or the EXHALE.
- » If asthma is also a concern, follow your physician's instructions regarding taking an inhaler after completing the breathing exercises.
- » Use it to "pre-treat" yourself before a known trigger for VCD.

EXERCISE:

1. **Shoulders Down.** *Your cue to relax.*
2. **Hand on Abdomen.** *Helps you focus on easy abdominal breath support—the best and most relaxed way to breathe.*
3. **Gentle, Quick 'Sip' of Air IN** ("sip, sip, sip")
 - a. Breathe in through your mouth (using a 3-inch straw is helpful, but just pursing your lips can work).
 - b. Pursed lips around the straw.
 - c. About 1 second for the INHALE.
4. **Gentle Blow of Air OUT** ("blow, blow, blow")
 - a. Through the slightly tight lips around the straw.
 - b. About 2-3 seconds for the EXHALE.
 - c. Breathing both In and OUT should be easy and relaxed.