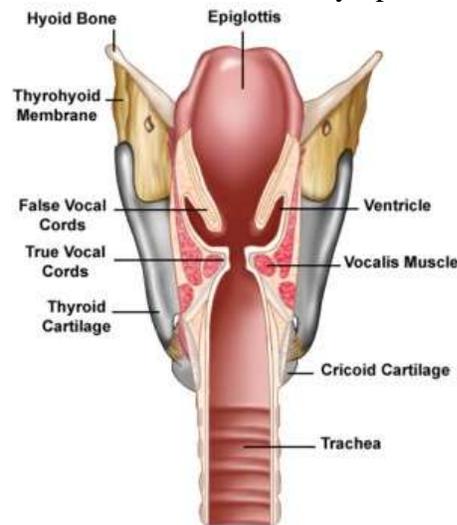


Vocal Cord Dysfunction (VCD) or Paradoxical Vocal Fold Motion

VCD is a condition where the one or both vocal cords close abnormally when breathing in. This can trigger a sensation similar to asthma. A person can experience shortness of breath, wheezing, chronic cough, and /or tightness of the neck. VCD co-occurs with asthma about 40% of the time. This can lead to a misdiagnosis of only asthma. Even young children can report the difference between an asthma attack (difficulty exhaling) vs. a VCD attack (primarily difficulty inhaling). Understanding the difference between the two will help those who have both understand when to use the rescue inhaler vs. when to use the breathing exercises. VCD should be considered in any patient with difficult to treat asthma and in athletes in whom exercise-induced symptoms fail to respond to asthma therapy.



Symptoms of VCD:

- Shortness of breath
- Hoarseness and/or wheezing
- Chronic cough and/or throat clearing
- Throat tightness
- Air hunger or having trouble getting air in
- Exaggerated sighing
- Light headed or dizzy

Diagnosis of VCD

Vocal cord dysfunction is often diagnosed when other diseases are ruled out. The most effective ways of diagnosing VCD is through direct laryngoscopy, and Video Stroboscopy. The former which is a procedure where a nasal scope is inserted in the nose to view the movement of the vocal folds and to determine if there is any abnormality. When it is recorded with a strobe light it is called video stroboscopy. This allows the study to be reviewed frame by frame.

The specialist will assess the vocal cords for abnormal constriction or adduction as well as for signs of swelling of the vocal folds and evidence of irritation or inflammation.

Cause of VCD

During VCD the vocal folds close and decrease the airflow during inhalation, exhalation or both. This leads to asthma like symptoms because less air flows into the trachea and lungs. VCD episodes can be triggered suddenly, or come on gradually.

Triggers

Typically one trigger causes VCD as opposed to asthma where there may be multiple triggers. Common triggers include: gastroesophageal reflux, exercise, strong odors (smoke, perfume, gas, cleaning chemicals, nebulizers, chlorinated pools) infection, allergens, and emotional stress.

Treatment

The good news is that VCD can be cured.

The treatment for VCD is often multidisciplinary involving the lung specialist, ear nose and throat specialist and a speech therapist. Anti-reflux medications are often prescribed to eliminate any complications from reflux that may be contributing to irritation of the vocal cords.

The speech therapist will teach the patient breathing exercises that will focus on improving breathing techniques which will lead to increased control over the patient's reaction to triggers. The patient will learn relaxation techniques and stress reduction to enhance recovery.

Basic Breathing Exercises

- 1. Sniffing hard through the nose then breathing out through rounded lips three times.**
- 2. Breathe out forcefully through lips and breathe in through the nose (or rounded lips) in a relaxed manner five times.**
- 3. Use short burst of exhalation and then breathe in gently through the nose (or rounded lips) five times.**

Each of this exercise should be performed until symptoms resolve during episodes.

Each exercise should be done slowly and in a calm manner as to prevent hyperventilation.

Once you are comfortable with the breathing exercises, performing them before exercise can be quite helpful.