



## **VCD – Vocal Cord Dysfunction**

### **What is Vocal Cord Dysfunction?**

Vocal Cord Dysfunction (VCD) is an abnormal spasm of the vocal cords during inspiration (breathing in). When we breathe in normally, the vocal cords are wide open and spread apart to let air in. When we talk, our vocal cords come together and tighten up allowing us to speak. The more they tighten, the higher the pitch; the looser they become, the lower in tone. During an episode of VCD, the vocal cords come together during inspiration causing an obstruction to the normal flow of air into our lungs. The more severe to the obstruction, the less air can get into our lungs during an attack. VCD was originally reported in young female athletes but it now appears to affect a wide variety of people. Young male adolescent, teenage females, and adults of both sexes and all ages can develop this condition.

### **What are the Symptoms of VCD?**

VCD often occurs as an acute attack of shortness of breath people with VCD will often complain of a sudden difficulty breathing during exercise or competitive sports. Symptoms include sudden onset of shortness of breath, especially during inspiration. Many people with VCD complain of a tightness in their lower throat or upper chest. VCD can cause chronic cough that does not respond well to inhalers often used for asthma or cough medications. VCD is often associated with frequent throat clearing and a barky cough. Many patients diagnosed with VCD have a form of acid reflux which causes irritation to the throat and vocal cords. Once the vocal cords become irritated from small quantities of stomach acid, they are prone to spasm causing attacks of VCD. Chronic throat clearing is often a sign of this irritation and an even make matters worse by further irritating the vocal cords. Stress is a key factor in this condition although many episodes seem to happen without warning.

## **What are the Key Triggers of VCD?**

Many patients with VCD have asthma and many asthmatics will have episodes of VCD. Asthma and VCD can exist at the same time or as separate events. It is often difficult for asthmatics to tell whether their symptoms of shortness of breath are from their asthma, VCD, or both conditions at the same time. Triggers of VCD can include strong chemical fumes, smoke, dust, perfumes, strong odors of any type, cold air, laughing, singing, exercise (especially competitive sports), respiratory infections, asthma, acid reflux, sinusitis, post nasal drip, and frequently stress.

## **How is VCD Diagnosed?**

VCD can be very difficult to diagnose. Some studies have reported that up to 40% of asthmatics also have episodes of VCD. Indeed, many patients diagnosed with asthma who do not improve with conventional therapy have VCD contributing to their symptoms. Breathing tests (spirometry, pulmonary function tests) which are done to evaluate lung disease can often show changes associated with VCD. Directly viewing the voice box during an episode of VCD (laryngoscopy) is the most accurate way to diagnose this condition. A good medical history by a physician trained in the diagnosis and treatment of lung disease is the most common way we diagnose VCD.

## **How is VCD Treated?**

Treatment of VCD begins with the correct diagnosis and understanding of this condition. Control of offending triggers and treatment of any underlying acid reflux is of great importance in controlling exacerbations. Techniques to control breathing and calm down spasms of the vocal cords are the mainstay of treatment. Specific medications for this condition do not exist. Patients are often referred to specially qualified Speech Therapists for an in-depth treatment which usually includes special exercises which must be practiced when symptom-free in order to effectively use them during an attack. Other conditions such as asthma need to be well controlled and patients are strongly encouraged to stop throat clearing. Counseling can be effective when stress is the main trigger.