Evaluation and Treatment of Vocal Cord Dysfunction (VCD)

Vocal chord dysfunction is an intermittent abnormal closing (coming together) of the vocal cords during the breath in and occasionally on the breath out. It is seen in patients with other upper and lower respiratory conditions such as asthma and allergies with postnasal drainage, as well as in those with acid reflux (GERD).

This closing of the vocal cords during the breath in often produces a noise not unlike a wheeze, but more correctly termed stridor. Stridor in children is usually heard during bouts with croup due to a viral infection. This causes swelling/narrowing of the throat below the vocal cords and results in the characteristic noise during a breath in.

Unlike the croup, children and young adults with VCD will not necessarily have a viral infection but can develop a cough, shortness of breath, difficulty getting a deep breath, or changes in their voice with the onset of stridor quite suddenly. Some possible triggers include activity (exercise), stressful situations, exposure to strong smells or cold air, emotional upset, post-nasal drip and upper respiratory infections. Individuals with VCD cannot produce symptoms voluntarily however symptoms are not usually present while asleep. The episodes are usually sudden in onset and last sometimes only minutes or hours. Rarely does an episode last all day although they can repeat daily.

The diagnosis is often difficult in light of the transient nature of the symptoms but a thorough history will often help eliminate other possibilities. Asthma is a diagnosis that often is given to those with VCD and can co-exist in some patients. During an episode of VCD, a specific breathing test called a flow volume loop can be helpful in showing the closing of the vocal cords. Another test involves using a flexible tube called a laryngoscope to visualize the abnormal vocal cords movements during breathing. Lastly, a challenge procedure in the pulmonary function lab with exercise or medication to bring on an episode often helps with the diagnosis of both VCD and asthma.

After the hard part, making the diagnosis, the treatment is relatively simple and remarkably successful. If VCD is your only diagnosis, then asthma medications can be discontinued. Speech therapists specializing in the treatment of VCD will teach you exercises to relax your throat muscles and enable more control over your breathing during situations that trigger your episodes. Usually one or two sessions is adequate to learn and practice the exercises. Most patients are then able to handle future episodes with minimal to no symptoms.

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