

Athletes who experience trouble breathing may have vocal cord dysfunction

March 20 2017, by Ann Blackford

Feeling like you can't breathe is frightening and can trigger anxiety and panic in the person experiencing it and those around them.

Paradoxical Vocal Fold Motion, or PVFM, often flares up in the late winter/early spring season for young elite athletes. PVFM has also been called Vocal Cord Dysfunction and is a disorder of the upper airway where the vocal folds (vocal cords) and muscles above the vocal folds tighten during breathing and cause difficulty breathing.

PVFM is a relatively uncommon problem for athletes and is often mistaken for asthma or exercise-induced bronchospasms. Symptoms of PVFM include difficulty breathing (described as difficulty getting a breath in), tightness of the throat, noisy breathing at the level of the throat, a sense of panic and anxiety, and non-responsiveness to typical asthma treatment.

The cause of PVFM is thought to be a hyper-response of the throat caused by a repeated irritant which, over time, trigger PVFM episodes. The average time from the first symptoms to diagnosis is around four years. This can be very frustrating for athletes as they try to continue their sport when their symptoms continue to worsen.

This breathing difficulty is not the same as feeling like you need to stop and catch your breath when you are conditioning for a sport. Rather, the athlete feels like the airway is blocked, not permitting the air to be inhaled. The acute breathing difficulty typically resolves quickly when



the athlete stops the physical activity that triggered the problem. PVFM can occur with any sport such as running, basketball, swimming, or dance.

In severe cases, athletes with PVFM may be brought to the emergency room for further evaluation due to breathing complaints. Respiratory (breathing) tests will all have normal results when PVFM is the cause. Because other diagnoses can be the cause of breathing problems, it is essential that an evaluation including visualization of the vocal folds is performed. PVFM should be assessed through a comprehensive evaluation by a speech-language pathologist who specializes in the evaluation of voice and upper airway disorders and a physician who treats upper airway disorders such as an ear, nose and throat physician (ENT) or a pulmonologist.

A pulmonologist will treat asthma and exercise-induced bronchospasms, which may occur in conjunction with PVFM. Patients may also be treated for acid reflux irritation if this is a contributing factor. The ENT physician will visualize the <u>vocal folds</u> to determine if inappropriate closure is the cause of the symptoms.

The speech-language pathologist will provide therapy, teaching breathing strategies for PVFM. Inspiratory muscle strength training, abdominal breathing, and vocal fold muscle rebalancing exercises will also be introduced to decrease the hypersensitivity in the throat. These exercises are then incorporated with physical movement that is adapted to the patient's sport.

If you think you or someone you know suffers from PVFM, we recommend a referral to an ENT physician and/or a pulmonologist along with a speech-language pathologist trained in voice and upper airway disorders. This will help determine the cause and appropriate treatments.



JoAnna Sloggy is a speech-language pathologist and singing voice specialist at the UK Voice & Swallow Clinic where she provides evaluation and treatment for patients with PVFM.

Provided by University of Kentucky

Citation: Athletes who experience trouble breathing may have vocal cord dysfunction (2017, March 20) retrieved 23 April 2024 from https://medicalxpress.com/news/2017-03-athletes-vocal-cord-dysfunction.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.