

Exercise-Induced Laryngeal Obstruction (EILO)

In 1983, doctors at National Jewish described a condition that may mimic asthma. This condition is called **vocal cord dysfunction**. A few years later, a similar condition occurring primarily during exercise was described. Today, this variant of vocal cord dysfunction is known as exercise-induced laryngeal obstruction (EILO).



What are the symptoms of EILO?

Symptoms of EILO can include:

- Shortness of breath during high-intensity exercise
- Stridor (noisy breathing) during exercise
- Frightening difficult breathing
- Chest and/or throat tightness
- “Just having trouble getting air in.”

What happens with EILO?

To understand EILO, it is helpful to understand how the vocal cords function. The vocal cords are located at the top of the windpipe (trachea) and vibrate to produce noise and voice. Breathing during exercise causes the vocal cords to open, allowing air to flow through the windpipe (trachea) and into the lungs. During episodes of EILO, the vocal cords constrict partially. This leaves a restricted opening for air to flow through the windpipe and causes shortness of breath. Although it is frequent confused with asthma, it is a completely separate problem.

What can trigger EILO symptoms?

Usually EILO is triggered only during high-intensity exercise. Some people can experience similar symptoms at other times (including low-intensity exercise and during exposure to irritating smells).

How is EILO diagnosed?

Making a diagnosis of EILO can be **very** difficult. If your doctor suspects EILO, you will be asked many questions about your symptoms. Breathing tests like spirometry can be useful in diagnosing EILO, but

only if they are done when symptoms are occurring. They are also helpful in the search for other explanations of symptoms. Laryngoscopy can be useful in diagnosing VCD and EILO, but generally only if it is done when symptoms are occurring. It is now possible to perform laryngoscopy simultaneous to the introduction of triggers that are specifically problematic to someone. National Jewish Health is one of a few centers in the world that can readily perform **continuous laryngoscopy during exercise**, a procedure which enables the visualization of the upper airway during intense exercise. This test is the most advanced test used in the evaluation of EILO.

How is EILO treated?

Once diagnosed with EILO, a specific treatment program can begin. There are special exercises and therapies that help control symptoms.

- Speech therapy is a very important part of the treatment for EILO. In speech therapy you will learn exercises to increase your awareness of abdominal breathing and relax your throat muscles. This enables you to have more control over your vocal cords and throat. The medical team will treat other conditions with medications (allergies, asthma, etc.). Since EILO is a separate diagnosis from asthma, its symptoms do not improve or only minimally improve with asthma medications alone.
- Another important part of treatment is supportive counseling or performance psychology, which can help you identify and deal positively with stress that may be an underlying factor in EILO.

Visit our website for more information about support groups, clinical trials and lifestyle information.

PTE.348 © Copyright 2016

NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 119 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.