

Irritable Larynx Syndrome (ILS)

What Is Irritable Larynx Syndrome (ILS)?

Irritable larynx syndrome (ILS) encompasses a range of conditions including chronic throat clearing, chronic cough, paradoxical vocal cord movement (PVFM)/vocal cord dysfunction (VCD), and laryngospasm. In ILS, the larynx (voice box) becomes very sensitive to stimuli leading to episodes of unnecessary and counterproductive vocal fold closure (PVFM and laryngospasm). Some common stimuli include strong smells, cold air, talking, etc.

What Causes ILS?

There are a couple theories surrounding the cause of ILS. The most common theory is that it's related to a viral illness that causes inflammation of the nerve that supplies the voice box. This in turn "resets" the sensitivity of the voice box and causes the nerve to react to stimuli at a much lower stimulus level, thereby making the voice box hypersensitive. Some believe that gastroesophageal reflux can cause chronic irritation of the voice box, leading to ILS. Allergies, sinusitis, certain medications, environmental exposures, and stressful life occurrences can also play a role.

What Are the Symptoms of ILS?

Symptoms of ILS usually last for longer than three weeks and have no other identifiable cause. Symptoms may include frequent non-productive throat clearing, chronic coughing attacks that bring up little or no mucus, and difficulty breathing with the sudden onset of stridor (noisy breathing). These episodes can be triggered by exercise or physical exertion, stress, voice use, variations in weather, or environmental irritants such as strong smells, dust, or smoke. Sometimes no specific trigger is identified.

How Is ILS diagnosed?

A laryngologist and speech language-pathologist jointly perform the work-up for ILS. A comprehensive history and exam is obtained. The exam includes a thorough laryngoscopic and stroboscopic examination to examine patterns of vocal fold motion and vocal fold vibration. Most of the time, an extensive work-up has already been performed to rule out other causes of the symptoms, including evaluation of the lungs for asthma or other pulmonary disease, evaluation of the sinuses and nose for sinusitis, post-nasal drip, and allergies, and evaluation of the esophagus and stomach for reflux disease.

What Is the treatment for ILS?

Because the cause of ILS is usually multifactorial, treatment may involve multiple strategies. The first line of treatment is typically behavioral intervention, which consists of voice therapy performed by a speech-language pathologist. Voice therapy will focus on desensitizing the throat/larynx and retraining the body's response to triggers. This is accomplished through education on vocal hygiene, respiratory retraining techniques, laryngeal massage, and voice efficiency techniques.

Medical intervention may also be recommended depending on the findings of the initial evaluation and the response to behavioral intervention. If your doctor suspects a medication may be contributing to your symptoms, they may suggest changing the medication. If reflux is suspected to be an issue, you may be started on a reflux medication or suggested lifestyle modifications.

Many times, ILS needs to be treated with medications in addition to voice therapy. Medications are used to reduce the sensitivity of the nerve that supplies your voice box. Medications used for this may include Elavil, gabapentin, Lyrica, Trileptal, and tramadol. All of these medications have side effects and are, therefore, started at a low dose and gradually increased if needed and tolerated.