Muscle Tension Dysphonia

Hyperfunction Of the Larynx

Causes

When you use your voice, muscles in your voice box, also known as your larynx, are activated. A hyperfunctioning larynx means that the muscles in the larynx are more active or more tense than they should be and the resulting abnormal voice is known as muscle tension dysphonia (MTD). Several factors are probably involved. These include upper respiratory infection, reflux, high vocal demand, and stress. Additionally, when there is another underlying problem in the larynx such as vocal fold atrophy, a vocal fold paralysis, or a benign lesion on the vocal fold, the primary muscles engaged in creating your voice become out of balance and muscle tension ensues.

Symptoms, Signs and Diagnosis

Symptoms include vocal fatigue, altered voice quality, a sensation that voice is more effortful, and loss of voice. Some people experience pain with speaking. Diagnosis is made based on your symptoms and the physical exam findings.

Laryngoscopy and videostroboscopy are endoscopic exams of the larynx that your physician will use to make an assessment. Common exam findings include compression of the larynx muscles above the actual vocal folds, compromised vocal fold vibration, vocal folds that do not contact the way they normally should. Tension in the front neck muscles is also common.

Treatment

The standard treatment for a hyperfunctional larynx is voice therapy. It can be quite helpful. Several approaches are available and include various exercises, as well as laryngeal massage.

In cases where the muscle hyperfunction is related to another underlying problem in the larynx, treating the underlying problem oftentimes will alleviate the muscle hyperfunction.