

ENT NEWS

A Service of the Ear, Nose, & Throat Center, PC

Spring 2003

Hoarseness

Hoarseness is an extremely common and usually benign symptom. However, the differential for hoarseness, or dysphonia, is large, and in some cases the earliest sign of dangerous underlying disease. It is therefore crucial for the primary care physician to have a good working knowledge of the differential of "laryngitis" and know the red flags that should trigger a referral to an otolaryngologist for further evaluation and treatment.

The Differential of Hoarseness

By far, the most common cause of hoarseness is **acute laryngitis**, nearly always viral in origin. Inflammation and edema of the vocal cords inhibit normal vibration, resulting in a strained, rough voice, sometimes progressing to aphonia. Typical viral upper respiratory symptoms such as rapid onset, cough, sore throat, and low grade temperatures are not uncommon. Acute laryngitis should spontaneously resolve within 10-14 days, and persistence should trigger a referral.

Benign vocal cord lesions such as **nodules**, **polyps**, or **varices** are common findings in individuals with a history of gradual onset of hoarseness. Frequently, onset of the voice change occurs after a particular episode of abusive voice use such as yelling or loud prolonged singing. They often complain of easy vocal fatigue, inability to sing, (especially in higher ranges), and worsening hoarseness with prolonged voice use. While some can be treated conservatively with voice rest or speech therapy, many benign lesions require surgical excision and voice training to prevent reoccurrence.

Vocal cord paralysis is less common, but can be caused by a multitude of factors. **Postsurgical paralysis** is relatively straightforward, and may resolve or compensate with time and training. **Idiopathic paralysis**, in many cases thought to be a viral cranial mononeuropathy similar to Bell's palsy, may be related to a viral respiratory illness and again may resolve or compensate. More concerning is the possibility of **malignancy**, most commonly lung carcinoma, causing compression of the recurrent laryngeal nerve in the chest. A breathy voice with an inability to sustain vocalization is typical, and aspiration of liquids is common in severe cases. A CT scan from the skull base through the mid-chest is necessary in any vocal cord paralysis of unknown cause. Treatment options are many, although newer techniques of vocal cord medialization with Gore-Tex or silastic implants, or injectable materials such as collagen or autologous fat, have been very successful in improving voice.

Muscle tension dysphonia or **functional dysphonia** often begins as typical acute laryngitis, but due to poor vocal use and maladaptive compensatory techniques, results in long term hoarseness. Patients often complain of a strained voice, anterior neck pain (particularly at the strap muscles), and sometimes sporadic periods of normal voice. Occasionally the spoken voice will be hoarse, but relaxed vocalization such as laughing or sighing will be normal. Speech pathology sessions are often required to correct bad vocal habits.

Spasmodic dysphonia is a neurologic disorder, thought to be a dystonia of the true vocal cords. It can be one of two predominant types: **adductor SD**, which is characterized by a choked, spastic vocal quality due to the vocal cords squeezing shut, or **abductor SD**, characterized by breathy breaks. It can be seen in association with other tics or dystonias. The treatment of choice is intracordal injection of Botox, guided by EMG, which provides temporary but reliable control for the majority of patients.

Laryngeal cancer is a potentially deadly disease, but with advances in treatment is very treatable if caught early. Since hoarseness is the most common and earliest symptom, any smoker or heavy drinker with hoarseness greater than 2-3 weeks should be evaluated. Stridor, hemoptysis, dysphagia, and otalgia are often later and more ominous symptoms. With early treatment by either surgery or radiation, five-year survival is better than 95% for small (T1) lesions.

What to expect from your ENT physician

Evaluation begins with a thorough exam, particularly visualization of the vocal cords. While mirror examination is often adequate, fiberoptic or stroboscopic visualization allows photographic records and a more comprehensive exam. Based on the findings, and sometimes with the assistance of a speech pathologist, a focused treatment plan should be developed and clearly relayed to your office. At the Ear, Nose, and Throat Center, we are fully equipped to diagnose and treat the spectrum of hoarseness and dysphonia, and are always willing to discuss any challenging voice patient. Remember:

- Benign laryngitis should resolve by 2-3 weeks, and referral for evaluation is indicated if persistent.
- Have a low threshold for referral for smokers and alcohol abusers.