Insight into Causes, Prevention, and Treatment of Hoarseness

What is hoarseness?

Hoarseness is a general term that describes abnormal voice changes. When hoarse, the voice may sound breathy, raspy, strained, or there may be changes in volume (loudness) or pitch (how high or low the voice is). The changes in sound are usually due to disorders related to the vocal folds that are the sound producing parts of the voice box (larynx). While breathing, the vocal folds remain apart. When speaking or singing, they come together, and as air leaves the lungs, they vibrate, producing sound. More rapid vibration makes a higher voice pitch. Swelling or lumps on the vocal folds prevent them from coming together properly, which makes a change in the voice.

What are the causes?

**Acute Laryngitis**

There are many causes of hoarseness. Fortunately, most are not serious and tend to go away in a short period of time. The most common causes are acute laryngitis, which usually occurs due to swelling from a common cold, upper respiratory tract viral infection, or irritation caused by excessive voice use such as screaming or yelling.

**Vocal Nodules**

More prolonged hoarseness is usually due to using your voice either too much, too loudly, or improperly over extended periods of time. These habits can lead to vocal nodules, which are callous-like growths, or may lead to polyps of the vocal folds (more extensive swelling). Vocal nodules are usually treated with voice therapy.

**Laryngopharyngeal Reflux [LPR]**

A common cause of hoarseness in adults is acid reflux, when stomach acid comes up the swallowing tube (esophagus) and irritates the vocal folds. Many patients with reflux related changes of voice do not have symptoms of heartburn. Usually, the voice is worse in the morning and improves during the day. These people may have a sensation of a lump in their throat, mucous sticking in their throat or an excessive desire to clear their throat.

**Smoking**

Smoking is another cause of hoarseness. Since smoking is the major cause of throat cancer, if smokers are hoarse, they should see an otolaryngologist.

**Other Causes**

Unusual causes for hoarseness include allergies, thyroid problems, neurological disorders, or trauma to the voice box. Many people experience some hoarseness with advanced age.
When should I see an Otolaryngologist?

- Hoarseness lasts longer than 2–3 weeks;
- Hoarseness that is associated with any of the following symptoms: persistent pain, coughing up blood, difficulty swallowing, or a lump in the neck;
- Loss or severe change in voice lasting longer than two weeks.

How is hoarseness evaluated?

Your otolaryngologist will obtain a thorough history of the hoarseness and your general health. Your doctor will usually look at the vocal folds with a mirror placed in the back of your throat, or with a very small lighted flexible tube (Fiberoptic scope) that is passed through your nose (or in some cases, a rigid scope may be used which is placed in the back of your mouth) in order to view your vocal folds. Videotaping the examination, called Videostroboscopy, may also help with the analysis.

How are vocal disorders treated?

The treatment of hoarseness depends on the cause. Most hoarseness can be treated by simply resting the voice or modifying how it is used. Your otolaryngologist may make some recommendations about voice use behavior, refer you to other voice team members for voice therapy, and in some instances recommend surgery if a lesion, such as a nodule or polyp, is identified. Avoidance of smoking or exposure to secondhand smoke (passive smoking) is recommended to all patients. Drinking fluids is also helpful.

Specialists in speech/language pathology are trained to assist patients in behavior modification that may help eliminate some voice disorders. Sometimes, patients have developed bad habits, such as smoking or overuse of their voice by yelling and screaming. The speech/language pathologist may teach patients to alter their method of speech production to improve the sound of the voice and to resolve problems, such as vocal nodules. When a patient's problem is specifically related to singing, a singing teacher may help improve the patients' singing techniques.

What can I do to prevent and treat mild hoarseness?

- If you smoke, attempt to quit
- Avoid things that can cause dehydration, such as alcohol and caffeine
- Avoid second-hand smoke
- Drink plenty of water
- Humidify your home
- Try not to use your voice too long or too loudly
- Seek professional voice therapy
- Watch your diet–avoid spicy foods
- Avoid speaking or singing when your voice is injured or hoarse