

## **VOICE DISORDERS**

### **What causes hoarseness?**

Having a normal-sounding voice requires a delicately-balanced complex physiology of the larynx and respiratory tract. First, vocal cords must be healthy and free from swelling or physical masses or lesions. Second, the vocal cords must be covered by a thin layer of secretions. Third, muscles around the vocal cords must be able to contract in a smooth and controlled way to allow for vocal cord mobility. Fourth, a steady column of air must be applied from the lungs due to function of the diaphragm.

Problems with any of these normal physiological functions can present with hoarseness. The vocal cords themselves may have swelling (as is the case with laryngitis) or masses or lesions. Acid reflux commonly causes irritation of the lining of the larynx. Vocal cords may have benign nodules, polyps, cysts, or cancerous growths. Abnormal dryness of the mucus membranes or thickening of secretions may cause voice problems. Excessive post-nasal drainage from allergy or sinus disease may also cause hoarseness. Neuromuscular diseases can affect the voice as well. Examples of these include vocal cord paralysis and vocal cord tremor. Finally, respiratory diseases or infections can affect the voice.

### **When should hoarseness be evaluated by a specialist?**

Any hoarseness that lasts more than 3 weeks should be evaluated by an otolaryngologist. Some causes of hoarseness include dangerous diseases and early diagnosis is of paramount importance.

### **How is the diagnosis made?**

Your ENT physician will perform a thorough history and physical examination, including a fiberoptic examination of the vocal cords in the office. In most cases, the diagnosis is apparent on examination of the vocal cords with observation of vocal function.

### **What does fiberoptic examination entail?**

This procedure is commonly performed in the office at the time of the regular office visit. The nasal cavity is sprayed with a topical decongestant and anesthetic. The thin fiberoptic light cord is inserted through the nasal cavity and used to inspect the nasal cavity, throat, and vocal cords. The procedure takes just a few minutes and involves little or no discomfort.

### **How is hoarseness treated?**

As one would imagine, the treatment depends on the underlying cause. Laryngitis caused by a viral infection should spontaneously resolve within 1-3 weeks. Vocal cord lesions may require surgical removal or medical treatment. Post-nasal drainage may require treatment of the associated allergy or sinus disease. Cancer of the vocal cords may require radiation treatments or surgical removal. Vocal cord paralysis may require additional tests to determine the cause and may usually be treated with vocal cord injections or implants. Speech therapy is also very helpful in regaining normal vocal function for any of these diseases.