

## VOCAL CORD MASSES



**Vocal cord masses** include nodules, polyps, cysts and pseudocysts, vascular lesions, and papilloma. They can be caused by poor vocal technique/use, poor hygiene, a virus, or illness.

### TYPES OF VOCAL MASSES

Vocal masses may vary such as:

- ▶ **Nodules:** Nodules are thick growths on the vocal folds that are similar to calluses. Often the result of vocally abusive behaviors, nodules typically cause changes to the voice that include hoarseness, breathiness, loss of range and vocal fatigue. Most performers are very concerned or fearful of a diagnosis of “singer’s nodules.” But this is not really an accurate term. They are more frequently caused by voice abuse that occurs during speaking than by abuse while using the singing voice. Nodules are superficial lesions of the vocal folds and are almost always treated without surgical intervention. Voice therapy is the primary modality of treatment and is curative in most patients, even if the nodules have existed for years. Accurate diagnosis is very difficult without laryngeal stroboscopy and video recording instrumentation. Vocal fold cysts and nodules are commonly confused with or misdiagnosed as other types of vocal cord lesions, but they need to be treated very differently. Therefore, it is important that they are properly evaluated by an experienced laryngologist. Most nodules, and many other benign vocal fold lesions, are not career-threatening problems when diagnosed and treated appropriately.
- ▶ **Polyps:** Polyps occur in the middle of the vocal fold, and are usually caused by severe vocal trauma, such as yelling loudly, chronic voice abuse, vocal cord hemorrhage or chronic cough. These benign masses are typically unilateral, meaning they occur on only one vocal fold. Usually superficial, they may resolve with conservative therapy but often require surgery. If left untreated, polyps can produce a callus-like or reactive contact injury on the opposite vocal fold. This can result in misdiagnosis as nodules if not properly evaluated with laryngeal stroboscopy.
- ▶ **Reinke’s Edema:** Reinke’s edema of the vocal cords (also known as smoker’s polyps) of the vocal cords or polypoid corditis is chronic swelling and inflammation of the vocal cords. It is associated with reflux disease, voice use, and longtime smokers. Longtime smokers may develop a lot of swelling and eventually polyps on both vocal cords. This is why many smokers have a deep and raspy voice.
- ▶ **Cysts and Pseudocysts:** Cysts are benign, fluid-filled masses that may form on the vocal folds, and are usually non-cancerous. They occur as a result of severe vocal trauma, such as yelling loudly, chronic voice abuse, vocal cord hemorrhage or chronic cough. Pseudocysts, or retention cysts, are superficial lesions filled with mucus. True epithelial lined cysts are often deeper lesions filled with caseous material. Cysts are typically removed utilizing suspension microlaryngoscopy with a microflap excision technique, although voice therapy may be sufficient for some patients.
- ▶ **Vascular Lesions:** Vascular lesions are abnormalities of blood vessels that result in a mass on the vocal fold and/or hemorrhage into the vocal fold that results in hoarseness, inflammation, polyp or scarring. The treatment of vascular lesions of the vocal fold may include voice therapy, medication, laser photoablation and/or microlaryngeal surgery, depending upon the condition.
- ▶ **Papilloma:** Papilloma, or Recurrent Respiratory Papillomatosis (RRP), is a typically benign tumor of epithelial tissue within the larynx, trachea or throat caused by human papilloma virus (HPV). Papillomas can cause hoarseness and may grow in size to eventually block the airway, leading to a potentially life threatening obstruction. Certain high-risk subtypes of papilloma may also develop into cancer. These tumors can affect patients of all ages, and are usually recurrent. Papilloma is typically treated with laser photoablation, microlaryngeal surgery or intralaryngeal injection with cidofovir.

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### SYMPTOMS

There may be additional symptoms such as:

- ▶ Chronic hoarseness such as a raspy voice, breathy voice, voice quiver, strained or choppy voice (for more than **2** weeks)
- ▶ Pain or lump in the throat
- ▶ Changes in voice pitch
- ▶ Odd sounding speech
- ▶ Pain from ear to ear
- ▶ Loss of vocal range
- ▶ Easy voice fatigue

### TREATMENT

- ▶ **Laser Surgery of Vocal Cord Growths:** If suspicious growths are detected on the vocal cords, they can be surgically removed with a laser. Laser surgery is typically performed as an outpatient procedure in our Los Angeles area office, and can treat cancer in one procedure, unlike radiation therapy. There are two different types of lasers, KTP and CO<sub>2</sub>, that can be used for specific benign and malignant lesions. Growths are removed and then sent to a lab to determine whether or not they are cancerous. After laser surgery, patients experience short recovery times with minimal to no complications.
  - ◇ Treatment Option:
    - » **Reinke's Edema:** Laser energy can be applied to a patient's vocal folds.
- ▶ **Microflap Excision:** Cysts, polyps and precancerous lesions may develop within the vocal cords, and can lead to speaking or breathing difficulties. Treatment of vocal fold lesions such as these may require surgical excision. Microflap excision is an advanced, minimally invasive surgical procedure that was developed to precisely remove vocal fold lesions under high magnification with no disruption to surrounding healthy tissue. Typically, these procedures are performed by otolaryngologists with advanced training in these techniques. Patients benefit from faster recovery and superior voice quality as compared to traditional laryngeal surgery.
- ▶ **Suspension Microlaryngoscopy:** Suspension microlaryngoscopy is a minimally invasive surgical procedure performed to evaluate and treat laryngeal conditions. Under general anesthesia a metal cylinder known as a laryngoscope is passed through the patient's mouth and into the throat, which the surgeon will be able to look through and check for abnormalities on the vocal cords. A laryngeal endoscope or microscope are used to evaluate and treat conditions of the larynx under high magnification. Typically, these procedures are performed by otolaryngologists with advanced training in these techniques. Patients benefit from faster recovery and superior voice quality as compared to traditional laryngeal surgery.
- ▶ **Cancer Treatment:** Cancer can affect any of the structures of the throat including the tonsils, base of tongue, larynx and hypopharynx. Its risk factors include smoking, alcohol abuse, reflux (GERD or LPR), poor oral hygiene and, most commonly in younger patients, exposure to human papilloma virus (HPV). The symptoms of throat cancer may include throat or ear pain, a mass in the mouth, tonsil or tongue, difficulty swallowing, neck mass or lump, hoarseness, cough, breathing difficulty or airway obstruction. Diagnosis may be made through an examination, endoscopy, biopsy and/or imaging study such as CT, MRI or PET scans. Once diagnosed, treatment may include:
  - ◇ **Radiation**
  - ◇ **Surgery**
  - ◇ **Chemotherapy**
- ▶ **Diet:** If acid reflux is the cause of a polyp, your physician may have dietary suggestions.