Vocal Cord Nodules, Polyps, Cysts

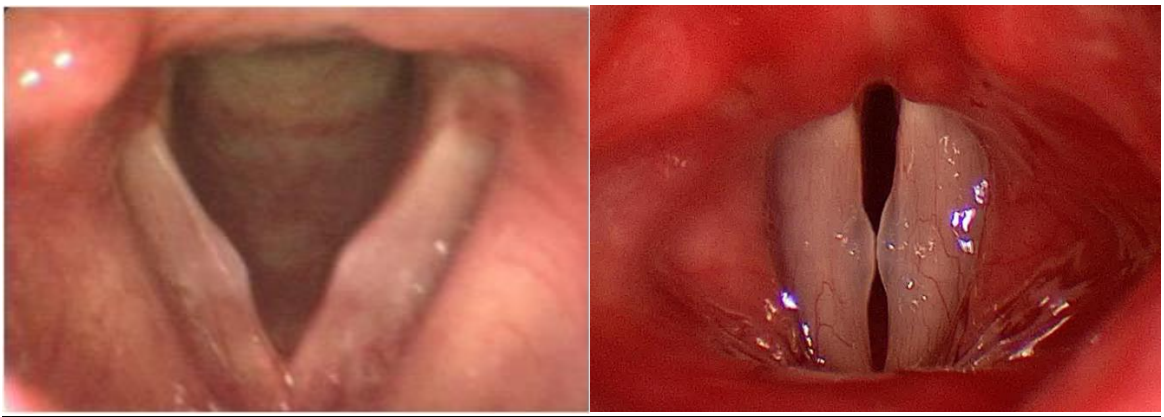
Causes

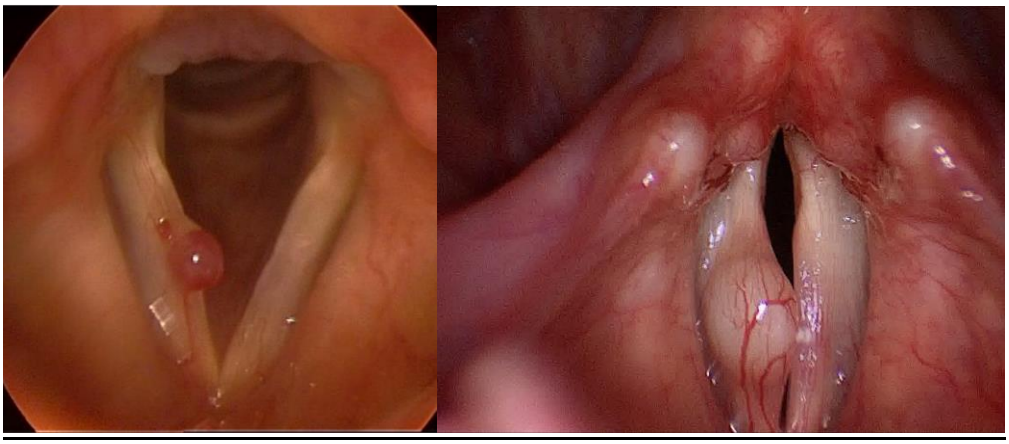
- Vocal cord nodules, polyps, and cysts are examples of benign vocal cord growths which can lead to hoarseness.
- These growths can be associated with high levels of voice use (either brief or prolonged), inefficient or ineffective voice production, unfavorable environment (i.e. loud background noise), or other factors.
- Growths may be on one side only (unilateral) or may involve both sides (bilateral).

Symptoms, Signs, and Diagnosis

- The most common symptom of benign vocal cord growth(s) is hoarseness. Changes to voice can include raspiness or other change in quality (e.g. breathy, etc.), increased vocal effort or strain, vocal fatigue, change of pitch, or others. Speaking and/or singing may be affected.
- Diagnosis of benign vocal cord growth(s) is made by examination of the larynx (aka voice box), most often with a flexible or rigid telescope (called laryngoscopy). Stroboscopy (a specialized test to evaluate vibration of the vocal cords) is critical to assess the impact of these growth(s) on vocal cord vibration and thus the voice.

Examples of benign vocal cord growths, from left to right and top to bottom: 1) bilateral nodules, 2) bilateral polyps, 3) right vocal cord hemorrhagic polyp, and 4) right vocal cord cyst





Treatment

- Optimize any patient-related contributing factors: adequate hydration, avoidance of caffeine, treatment of inflammatory conditions (acid-reflux, allergies, stopping smoking), and evaluation of voice use patterns.
- Patients should be assessed by a speech-language pathologist to determine their candidacy (or *stimulability*) for voice therapy. In appropriately-selected patients, voice therapy may significantly improve voice and/or laryngeal exam findings. Sometimes voice therapy alone resolves the voice symptoms; in other situations voice therapy may need to be combined with surgical treatment (i.e. before surgery, after surgery, or both).
- Surgical treatment to address polyps or cysts has traditionally consisted of surgical removal (aka phonomicrosurgery or microflap excision). Sometimes, laser ablation treatment may be an appropriate alternative option. Voice outcomes after surgery in appropriately selected patients is generally very good although further interventions (e.g. voice therapy, additional procedures, etc.) may occasionally be needed. Adherence to post-operative recommendations (e.g. voice rest, voice therapy, stopping smoking, etc.) is vital to help optimize healing after surgery.