Laryngeal Problems

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KEYWORDS

• Laryngopharyngeal reflux • Larynx • Endoscopy • Hoarseness • Vocal cord

KEY POINTS

- Chronic hoarseness is the most common presenting concern for patients with laryngeal pathologic abnormality.
- Chronic hoarseness lasting longer than 3 weeks merits visualization of the vocal cords, especially in smokers because of the potential for carcinoma.
- Early diagnosis and treatment are important for improving outcomes in patients with laryngeal carcinoma.
- As many as half of patients with laryngeal and voice disorders have laryngopharyngeal reflux (LPR).
- Most patients with LPR do not have classic gastroesophageal reflux disease symptoms, so treatment must be more aggressive and prolonged.
- Visualization of the hypopharynx and larynx is best accomplished via flexible nasolaryngoscopy.

INTRODUCTION

Laryngeal complaints are common reasons for patients to seek care in family medicine offices. There is considerable overlap between patient symptoms, such as hoarseness and chronic cough, and final diagnosis, such as laryngopharyngeal reflux (LPR) or laryngeal carcinoma. Therefore, this article begins with a general approach to laryngeal symptoms followed by individual consideration of both the common and serious conditions of the larynx. The focus is on adults because children who present with chronic laryngeal complaints are usually younger than 3 years of age, too young to cooperate with office evaluation, thus requiring initial specialist referral.[1]

Elderly patients have a high prevalence of voice problems but often assume they are a natural part of aging. However, the voice problem can negatively affect quality of life and socialization, particularly when combined with hearing problems. Many voice problems are treatable; therefore, physicians can meaningfully intervene when, in the course of comprehensive care of elderly patients, they recognize and offer treatment options to elderly patients with voice findings.[2]

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PATIENT HISTORY

Patients with a laryngeal pathologic condition present most commonly with chronic hoarseness. This may be the classic raspy, weak voice or may be more subtle dysphonia as in easy voice fatigue or loss of singing range. Acute hoarseness is a common symptom of self-limited upper respiratory infections. Chronic hoarseness typically means longer than 3 weeks, the usual time by which the symptoms from acute respiratory infections should have resolved. After 3 weeks, the likelihood of a significant pathologic condition increases and thorough evaluation is indicated. This is especially true in smokers because of the increased incidence of laryngeal cancer and the importance of early definitive treatment to achieve a good outcome.[3]

Other common presenting symptoms include chronic cough, globus or foreign-body sensation, chronic sore throat, and frequent throat clearing. People in occupations that depend on the use of their voice are most likely to present for voice concerns and are often the patients at greatest risk of vocal abuse, including teachers, public speakers, singers, and so forth.

PHYSICAL EXAMINATION

The hypopharynx and larynx cannot be visualized on standard physical examination, so special instruments are required. Classically, the examiner used a combination of a lamp behind the patient aligned with a head mirror aligned with a right-angle laryngeal mirror inserted past the patient's tongue to gain an indirect view. Now the examination can be accomplished directly via flexible nasolaryngoscopy.

In addition to visualization of the hypopharynx and larynx, physical examination should include a thorough head and neck examination focusing on potential signs of chronic inflammation or irritation, such as sinusitis or allergic rhinitis, and potential neoplasia, such as masses under the tongue or on the thyroid or cervical lymph nodes.

ANATOMY

To address laryngeal problems, first it is important to understand the anatomy. **Fig. 1** outlines the key anatomic structures of the larynx. The figure is oriented with anterior at the bottom, the way the larynx appears through the nasolaryngoscope instead of the traditional anterior at the top orientation of anatomy texts and imaging studies. Key anterior landmarks include the vallecula and epiglottis. The primary landmarks posteriorly are the

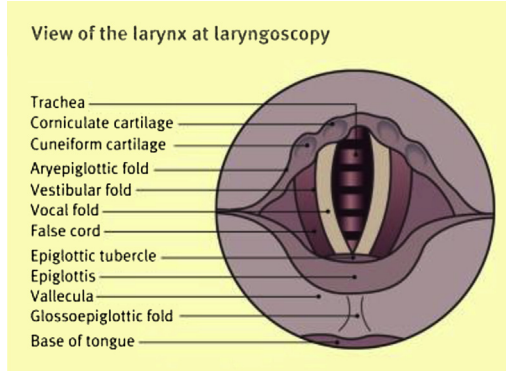

Fig. 1. Laryngeal anatomy. (*Modified from* Burdett E, Mitchell V. Anatomy of the larynx, trachea, and bronchi. Anesthesia & Intensive Care Medicine 2008;9(8):329–33; with permission.)