

## Clinical Guideline Synopsis

## Management of Hoarseness

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**GUIDELINE TITLE:** Clinical Practice Guideline: Hoarseness (Dysphonia)

**DEVELOPER:** American Academy of Otolaryngology–Head and Neck Surgery (AAO-HNS)

**RELEASE DATE:** March 1, 2018

**PRIOR VERSION:** 2009

**FUNDING SOURCE:** AAO-HNS

**TARGET POPULATION:** Adults and children with hoarseness

**MAJOR RECOMMENDATIONS:**

- Expedited laryngeal examination is recommended when there is a suspected serious underlying cause (including after

recent head, neck, or chest surgery; recent intubation; concomitant neck mass; respiratory distress stridor; tobacco abuse history) or if professional voice user.

- Laryngoscopy should be performed if dysphonia fails to resolve or improve within 4 weeks or irrespective of duration if a serious underlying cause suspected.
- Imaging (eg, computed tomography, magnetic resonance imaging) should not be obtained in patients with a primary voice complaint without first visualizing the larynx.
- Antireflux medications should not be prescribed to treat isolated dysphonia based on symptoms alone without first visualizing the larynx.
- Corticosteroids should not be routinely prescribed in patients with dysphonia prior to visualizing the larynx.
- Antibiotics should not be routinely prescribed to treat dysphonia.
- All dysphonic patients should be counseled about supportive and preventive measures.

### Summary of the Clinical Problem

Hoarseness (dysphonia) affects 3.2 million people in the United States every day<sup>1</sup> and has higher prevalence among teachers, older adults, and others with significant vocal demands.<sup>2,3</sup> Dysphonia is a symptom of upper respiratory infection and other common, benign conditions but can herald serious disease that requires prompt diagnosis and management. Most dysphonic patients are cared for by general practitioners, but a multidisciplinary management approach is often needed when symptoms are nonresponsive to standard therapies. The AAO-HNS guidelines<sup>4</sup> weave evidence with consensus expert opinion to inform dysphonia management throughout the spectrum of care to promote evidence-based decision making about appropriate care for dysphonic patients.

### Characteristics of the Guideline Source

The AAO-HNS developed these guidelines (Table).<sup>5</sup> Panel members were nominated based on expertise in relevant topic areas and included a cross-section of medical specialties, nursing, and patient stakeholders. An information specialist performed a review of the dysphonia literature published since the original guideline (2008-2017).<sup>6</sup> Conflict of interest disclosures were made at nomination and before each meeting.

### Evidence Base

Identified articles were subject to stringent quality criteria, yielding 3 clinical practice guidelines, 16 systematic reviews, and 4 randomized clinical trials. The dysphonia literature consists primarily of observational studies with lower evidence levels; therefore, panel members executed targeted independent literature searches to fill knowledge gaps ascertained during guideline

Table. Guideline Rating

Standard	Rating
Establishing transparency	Good
Management of conflict of interest in the guideline development group	Good
Guideline development group composition	Good
Clinical practice guideline-systematic review intersection	Poor
Establishing evidence foundation and rating strength for each guideline recommendations	Fair
Articulation of recommendations	Good
External review	Good
Updating	Good
Implementation issues	Good

Adapted from *Clinical Practice Guidelines We Can Trust*.<sup>5</sup>

development. External peer review and public comment were completed after panel consensus on draft recommendations and before guideline publication.

### Benefits and Harms

These guidelines are intended to facilitate organized, coordinated, and interdisciplinary care of patients with dysphonia. The synopsis focuses on new and revised recommendations.

The guidelines strongly recommend that dysphonic patients get expedient referral to a clinician who can perform laryngoscopy in select circumstances (eg, postsurgery or intubation, tobacco abuse) or if particular signs (eg, concomitant neck mass) and/or symptoms (eg, respiratory distress, dysarthria) are present. Benefits of

identifying patients for whom early intervention may be indicated outweigh risks related to laryngoscopy.

Absent alarm circumstances, guidelines recommend that clinicians perform or refer patients for laryngoscopy if dysphonia does not improve or resolve within 4 weeks of onset. This time frame minimizes the risk of a missed or delayed diagnosis of serious underlying condition. Furthermore, they recommend against laryngeal imaging (computed tomography, magnetic resonance imaging) without first visualizing the larynx. Laryngoscopy is preferred because it provides targeted diagnostic data needed to differentiate among possible underlying etiologies for dysphonia while avoiding harms of radiation and/or contrast exposure.

The guidelines discourage empirical pharmacological treatment of dysphonia without first visualizing the larynx. Specifically, they recommend against prescribing antireflux medications to treat isolated dysphonia based on symptoms alone that the treating clinician attributes to reflux without prior laryngoscopy. They also recommend against prescribing corticosteroids for dysphonia without first performing laryngoscopy. Moreover, evidence warrants a strong recommendation against the routine use of antibiotics for dysphonia. Antibiotics provide no benefit for common causes of dysphonia (eg, acute laryngitis). Rather than empirical prescription of these medications, guidelines recommend that clinicians educate dysphonic patients about supportive and preventive measures (eg, hydration, humidification, voice conservation). This conservative approach is economical and proactive and can speed recovery and prevent dysphonia recurrence.

## Discussion

Two significant themes pervade the guidelines. First, they discourage empirical treatment of dysphonia with antireflux medication, ste-

roids, or antibiotics. Unfortunately, these medications remain pervasive treatments for acute laryngitis<sup>7</sup> despite unambiguous evidence showing their ineffectiveness.<sup>8</sup> They do not hasten recovery, they put patients at risk for adverse effects, may delay definitive diagnosis, and, in the case of antibiotics, promote antibiotic-resistant bacteria, which is a major public health concern. Instead, empirical treatment for acutely dysphonic patients should focus on education, prevention, and supportive care.

A second theme is to guide clinicians about when laryngoscopy is indicated. Laryngoscopy is often synonymous with referral to an otolaryngologist because few medical specialties today are trained to examine the larynx. Without an examination, clinicians are treating without knowing the diagnosis, and that is a problem. Dysphonia is typically due to benign, self-limiting conditions. However, we must not forget that if it persists or associated alarm signs, symptoms, or circumstances are present, it is our responsibility to advocate for laryngoscopy to rule out nefarious disease.

## Areas in Need of Future Study or Ongoing Research

From a public health standpoint, it is important to identify more effective methods of reducing inappropriate empirical treatment of dysphonia with antibiotics, steroids, and antireflux medications. Improved understanding of which populations are at risk for dysphonia will inform novel preventive strategies for common causes of dysphonia. The guideline also exposes the dearth of high-quality evidence in the field. Comparative studies are needed to improve behavioral, medical, and surgical treatments of conditions causing dysphonia. Reasons why the literature is lacking include (1) suboptimal outcome measures, (2) incomplete characterization of conditions causing dysphonia, (3) lack of collaborative, multicenter studies, and (4) inadequate research funding for clinical research and trials.

## ARTICLE INFORMATION

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