Clinical practice guideline: Hoarseness (Dysphonia)

TARGET POPULATION — **Decidable (Y or N)**

Eligibility

The target patient for this guideline is anyone presenting with hoarseness (dysphonia). [ ]

Inclusion Criterion

· Hoarseness (dysphonia) [ ]

Exclusion Criterion

· History of laryngectomy (total or partial) [ ]

· Craniofacial anomalies [ ]

· Velopharyngeal insufficiency [ ]

· Dysarthria (impaired articulation) [ ]

RECOMMENDATIONS

Recommendation

STATEMENT 1. DIAGNOSIS

Conditional: Clinicians should diagnose hoarseness (dysphonia) in a patient with altered voice quality, pitch, loudness, or vocal effort that impairs communication or reduces voice-related QOL {quality of life}.

IF	**Decidable**	**Vocab**
patient with altered voice quality		
patient with altered pitch		
patient with altered loudness		
patient with altered vocal effort		
impairs communication		
reduces voice-related QOL {quality of life}		
THEN	**Executable**	**Vocab**
Clinicians should diagnose hoarseness (dysphonia)		

Evidence Quality: Grade C

Strength of Recommendation: Recommendation based on observational studies with a preponderance of benefit over harm

Reason:

Logic: If (patient with altered voice quality OR patient with altered pitch OR patient with altered loudness OR patient with altered vocal effort) AND (impairs communication OR reduces voice-related QOL {quality of life}) Then Clinicians should diagnose hoarseness (dysphonia)

Recommendation

STATEMENT 2. MODIFYING FACTORS

Imperative: Clinicians should assess the patient with hoarseness by history and/or physical examination for factors that modify management such as one or more of the following: recent surgical procedures involving the neck or affecting the recurrent laryngeal nerve, recent endotracheal intubation, radiation treatment to the neck, a history of tobacco abuse, and occupation as a singer or vocal performer.

IF

Inclusion Criterion:

· Hoarseness (dysphonia)

Exclusion Criterion: History of laryngectomy (total or partial)Craniofacial anomaliesVelopharyngeal insufficiencyDysarthria (impaired articulation)

THEN

	Executable	Vocab
Clinicians should assess the patient with hoarseness by history for factors that modify management		
Clinicians should assess the patient with hoarseness by physical examination for factors that modify management		

Evidence Quality: Grade C

Strength of Recommendation: Recommendation based on observational studies with a preponderance of benefit over harm

Reason:

Logic: If {Inclusion Criterion: Hoarseness (dysphonia) } Then Clinicians should assess the patient with hoarseness by history for factors that modify management OR Clinicians should assess the patient with hoarseness by physical examination for

factors that modify management

Cost: None

Recommendation

STATEMENT 3A. LARYNGOSCOPY AND HOARSENESS

Imperative: Clinicians may perform laryngoscopy, or may refer the patient to a clinician who can visualize the larynx, at any time in a patient with hoarseness.

IF

Inclusion Criterion:

· Hoarseness (dysphonia)

Exclusion Criterion: History of laryngectomy (total or partial)Craniofacial anomaliesVelopharyngeal insufficiencyDysarthria (impaired articulation)

THEN

	Executable	Vocab
Clinicians may perform laryngoscopy at any time in a patient with hoarseness		
Clinicians may refer the patient to a clinician who can visualize the larynx at any time in a patient with hoarseness		

Evidence Quality: Grade C

Strength of Recommendation: Option based on observational studies, expert opinion, and a balance of benefit and harm.

Reason:

Logic: If {Inclusion Criterion: Hoarseness (dysphonia) }, Then Clinicians may perform laryngoscopy at any time OR Clinicians may refer the patient to a clinicians who can visualize the larynx at any time

Cost: Procedural expense

Recommendation

STATEMENT 3B. INDICATIONS FOR LARYNGOSCOPY

Conditional: Clinicians should visualize the patient’s larynx, or refer the patient to a clinician who can visualize the larynx, when hoarseness fails to resolve by a maximum of three months

after onset, or irrespective of duration if a serious underlying cause is suspected.

IF	Decidable	Vocab
hoarseness fails to resolve by a maximum of three months after onset		
a serious underlying cause is suspected.		
THEN	**Executable**	**Vocab**
Clinicians should visualize the patient's larynx		
Clinicians should refer the patient to a clinician who can visualize the larynx		

Evidence Quality: Grade C

Strength of Recommendation: Recommendation based on observational studies, expert opinion, and a preponderance of benefit over harm.

Reason:

Logic: If hoarseness fails to resolve by a maximum of three months after onset OR a serious underlying cause is suspected. Then Clinicians should visualize the patient's larynx OR Clinicians should refer the patient to a clinician who can visualize the larynx

Recommendation

STATEMENT 4. IMAGING

Conditional: Clinicians should not obtain computed tomography (CT) or magnetic resonance imaging (MRI) of the patient with a primary complaint of hoarseness prior to visualizing the larynx.

IF	Decidable	Vocab
patient with a primary complaint of hoarseness		
prior to visualizing the larynx		
THEN	**Executable**	**Vocab**
Clinicians should not obtain computed tomography (CT)		
Clinicians should not obtain magnetic resonance imaging (MRI)		

Evidence Quality: Grade C

Strength of Recommendation: Recommendation against imaging based on observational studies of harm, absence of evidence concerning benefit, and a preponderance of harm over benefit

Reason:

Logic: If patient with a primary complaint of hoarseness AND prior to visualizing the larynx Then Clinicians should not obtain computed tomography (CT) AND Clinicians should not obtain magnetic resonance imaging (MRI)

Recommendation

STATEMENT 5A. ANTI-REFLUX MEDICATION AND HOARSENESS.

Conditional: Clinicians should not prescribe anti-reflux medications for patients with hoarseness without signs or symptoms of gastroesophageal reflux disease (GERD).

IF

Decidable	Vocab
for patients with hoarseness	
without signs of gastroesophageal reflux disease (GERD)	
without symptoms of gastroesophageal reflux disease (GERD)	

THEN

Executable	Vocab
Clinicians should not prescribe anti-reflux medications	

Evidence Quality: Grade B

Strength of Recommendation: Recommendation against prescribing based on randomized trials with limitations and observational studies with a preponderance of harm over benefit.

Reason:

Logic: If for patients with hoarseness AND without signs of gastroesophageal reflux disease (GERD) AND without symptoms of gastroesophageal reflux disease (GERD) Then Clinicians should not prescribe anti-reflux medications

Recommendation

STATEMENT 5B. ANTI-REFLUX MEDICATION AND CHRONIC LARYNGITIS.

Conditional: Clinicians may prescribe anti-reflux medication for patients with hoarseness and signs of chronic laryngitis.

IF

patients with hoarseness

signs of chronic laryngitis

Decidable	Vocab

THEN

Clinicians may prescribe anti-reflux medication

Executable	Vocab

Evidence Quality: Grade C

Strength of Recommendation: Option based on observational studies with limitations and a relative balance of benefit and harm

Reason:

Logic: If patients with hoarseness AND signs of chronic laryngitis Then Clinicians may prescribe anti-reflux medication

Recommendation

STATEMENT 6. CORTICOSTEROID THERAPY

Imperative: Clinicians should not routinely prescribe oral corticosteroids to treat hoarseness

IF

Inclusion Criterion:

· Hoarseness (dysphonia)

Exclusion Criterion: History of laryngectomy (total or partial)Craniofacial anomaliesVelopharyngeal insufficiencyDysarthria (impaired articulation)

THEN

Clinicians should not routinely prescribe oral corticosteroids to treat hoarseness

Executable	Vocab

Evidence Quality: Grade B

Strength of Recommendation: Recommendation against prescribing based on randomzied trials showing adverse events and absence of clinical trials demonstrating benefits with a preponderance of harm over benefit for steroid use

Reason:

Logic: If {Inclusion Criterion: Hoarseness (dysphonia) } Then Clinicians should not routinely prescribe oral corticosteroids to treat hoarseness

Cost: None

Recommendation

STATEMENT 7. ANTIMICROBIAL THERAPY

Imperative: Clinicians should not routinely prescribe antibiotics to treat hoarseness.

IF

Inclusion Criterion:

· Hoarseness (dysphonia)

Exclusion Criterion: History of laryngectomy (total or partial)Craniofacial anomaliesVelopharyngeal insufficiencyDysarthria (impaired articulation)

THEN

Executable	Vocab

Clinicians should not routinely prescribe antibiotics to treat hoarseness.

Evidence Quality: Grade A

Strength of Recommendation: Strong recommendation against prescribing prescribing based on systematic reviews and randomized trials showing ineffectiveness of antibiotic therapy and a preponderance of harm over benefit

Reason:

Logic: If {Inclusion Criterion: Hoarseness (dysphonia) } Then Clinicians should not routinely prescribe antibiotics to treat hoarseness.

Cost:

Recommendation

STATEMENT 8A. LARYNGOSCOPY PRIOR TO VOICE THERAPY

Conditional: Clinicians should visualize the larynx before prescribing voice therapy and document/communicate the results to the speech-language pathologist.

IF

Decidable	Vocab

before prescribing voice therapy

THEN

Executable	Vocab

	Clinicians should visualize the larynx		
	clinicians should document/communicate the results to the speech-language pathologist		

Evidence Quality: Grade C

Strength of Recommendation: Recommendation based on observational studies showing benefit and a preponderance of benefit over harm

Reason:

Logic: If before prescribing voice therapy Then Clinicians should visualize the larynx AND clinicians should document/communicate the results to the speech-language pathologist

Recommendation

STATEMENT 8B. ADVOCATING FOR VOICE THERAPY

Conditional: Clinicians should advocate voice therapy for patients diagnosed with hoarseness (dysphonia) that reduces voice-related quality of life (QOL).

	IF	**Decidable**	**Vocab**
	patients diagnosed with hoarseness (dysphonia) that reduces voice-related QOL {Quality of Life}		
	THEN	**Executable**	**Vocab**
	Clinicians should advocate voice therapy		

Evidence Quality: Grade A

Strength of Recommendation: Strong recommendation based on systematic reviews and randomized trials with a preponderance of benefit over harm

Reason:

Logic: If patients diagnosed with hoarseness (dysphonia) that reduces voice-related QOL {Quality of Life} Then Clinicians should advocate voice therapy

Recommendation

STATEMENT 9. SURGERY

Conditional: Clinicians should advocate for surgery as a therapeutic option in patients with hoarseness with suspected: 1)

laryngeal malignancy, 2) benign laryngeal soft tissue lesions, or 3) glottic insufficiency

IF	Decidable	Vocab
patients with hoarseness		
suspected laryngeal malignancy		
suspected benign laryngeal soft tissue lesions		
suspected glottic insufficiency		
THEN	**Executable**	**Vocab**
Clinicians should advocate for surgery as a therapeutic option		

Evidence Quality: Grade B

Strength of Recommendation: Recommendation based on observational studies demonstrating a benefit of surgery in these conditions and a preponderance of benefit over harm

Reason:

Logic: If patients with hoarseness AND (suspected laryngeal malignancy OR suspected benign laryngeal soft tissue lesions OR suspected glottic insufficiency) Then Clinicians should advocate for surgery as a therapeutic option

Recommendation

STATEMENT 10. BOTULINUM TOXIN

Conditional: Clinicians should prescribe, or refer the patient to a clinician who can prescribe, botulinum toxin injections for the treatment of hoarseness caused by spasmodic dysphonia

IF	Decidable	Vocab
for the treatment of hoarseness caused by spasmodic dysphonia		
THEN	**Executable**	**Vocab**
Clinicians should prescribe botulinum toxin injections		
Clinicians should refer the patient to a clinician who can prescribe botulinum toxin injections		

Evidence Quality: Grade B

Strength of Recommendation: Recommendation based on randomized controlled trials with minor limitations and preponderance of benefit over harm.

Reason:

Logic: If for the treatment of hoarseness caused by spasmodic dysphonia Then Clinicians should prescribe botulinum toxin injections OR Clinicians should refer the patient to a clinician who can prescribe botulinum toxin injections

Recommendation

STATEMENT 11. PREVENTION

Imperative: Clinicians may educate/counsel patients with hoarseness about control/preventive measures

IF

Inclusion Criterion:

· Hoarseness (dysphonia)

Exclusion Criterion: History of laryngectomy (total or partial)Craniofacial anomaliesVelopharyngeal insufficiencyDysarthria (impaired articulation)

THEN

Executable	Vocab

Clinicians may educate/counsel patients with hoarseness about control/preventive measures

Evidence Quality: Grade C

Strength of Recommendation: Option based on observational studies and small randomized trials of poor quality

Reason:

Logic: If {Inclusion Criterion: Hoarseness (dysphonia) } Then Clinicians may educate/counsel patients with hoarseness about control/preventive measures

Cost: Cost of vocal training sessions