MADISON NEUROLOGY · NEUROLOGY SYMPTOM GUIDE

Change in voice

Structured history, interpretation & clinical review

Symptom 52 of 94
Clinical educational workbook
Version 1.0 · October 2026

Not for clinical use. This guide cannot diagnose, triage, or exclude an emergency. Seek emergency care for severe, sudden, or worsening symptoms.

Contents

Scope and safe use 3

Section 1: Input form 4

1A. Immediate safety screen 4

1B. Timeline 4

1C. Discriminating features 4

1D. Associated findings 5

1E. Clinical context 5

Section 2: Interpreting the input form 7

Section 3: Clinical review 9

Selected references 11

> **Document purpose**
> A structured educational history and diagnostic-reasoning workbook. Treatment is outside its scope.

Scope and safe use

Voice change is classified as quiet, hoarse, nasal, strained, or wobbly, with attention to persistence, swallowing, breathing, fatigue, and laryngeal structural disease.

Not for clinical use.
This educational workbook does not diagnose, triage, estimate probability, replace examination, or exclude an emergency. If a safety-screen answer is Yes or uncertain, follow the stated action rather than continuing routine interpretation.

How to complete the workbook

- Record the current episode and the person’s usual baseline; use a witness account for events with impaired awareness.
- Check one option per question unless a clinician documents a different combination. “Not sure” is unresolved information, not a negative answer.
- Complete the safety screen before all other sections. Record exact onset or last-known-well time for sudden deficits.
- Use Section 2 only after the form is complete. More than one pattern may be relevant; urgency takes precedence.
- Use Section 3 to plan focused examination and clinician-selected investigations. No test is automatic or universally required.

Specific escalation rule

New severe headache, new focal weakness or numbness, new speech/language difficulty, reduced consciousness, a prolonged seizure, severe breathing or swallowing difficulty, sudden visual loss, or rapidly progressive weakness requires emergency assessment. Call 911 in the United States.

Section 1: Input form

Checkbox history for Change in voice

1A. Immediate safety screen

Is there new face droop, one-sided weakness or numbness, difficulty speaking or understanding, double vision, or severe loss of coordination?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now and record the exact time the person was last known well.

Is there new confusion, reduced consciousness, a seizure, or difficulty awakening?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now. Do not leave the person alone or give food, drink, or medication by mouth.

Is there new severe breathlessness, inability to swallow saliva, blue lips, or rapidly worsening weakness?

☐ No ☐ Yes ☐ Not sure

If Yes: Call emergency services now; breathing and swallowing problems can become critical quickly.

Is there sudden loss of vision, a new missing visual field, or a painful red eye?

☐ No ☐ Yes ☐ Not sure

If Yes: Seek emergency eye or emergency-department assessment now.

> **Stop rule:** Any Yes answer triggers the action printed under that question. Any Not sure answer requires prompt in-person clarification; do not treat it as No.

1B. Timeline

How did the symptom begin?

☐ Suddenly, over seconds or minutes ☐ Over hours to days ☐ Gradually over weeks or months ☐ Longstanding or since childhood ☐ Not sure

Use the first occurrence for recurrent episodes; use the current episode for a changing symptom.

What is the overall course?

☐ One persistent episode ☐ Separate recurrent episodes ☐ Steadily worsening ☐ Fluctuating or variable ☐ Currently resolved

Has this exact pattern been assessed before?

☐ Definitely new ☐ The same pattern occurred before ☐ Present and stable for a long time ☐ Not sure

1C. Discriminating features

Which voice change is most prominent?

☐ Quiet or breathy ☐ Hoarse or rough ☐ Nasal or hypernasal ☐ Strained, tremulous, or wobbly

What changes the voice?

☐ Worsens with prolonged speaking or later day ☐ Only with speaking or a specific vocal task ☐ Began with respiratory infection ☐ Constant without variation

Is there choking, nasal regurgitation, weak cough, or breathlessness?

☐ Yes ☐ No ☐ Not sure

How persistent is it?

☐ Resolved within days ☐ Persistent beyond 2–4 weeks ☐ Progressively worsening ☐ Recurrent episodes

1D. Associated findings

Are there other neurological symptoms—weakness, numbness, speech change, double vision, swallowing difficulty, or severe imbalance?

☐ Yes ☐ No ☐ Not sure

Are there systemic clues—fever, weight loss, cancer, infection risk, pregnancy/postpartum status, or a new medication?

☐ Yes ☐ No ☐ Not sure

How much does this affect daily activity?

☐ Noticeable but activities continue ☐ Some activities are limited ☐ Cannot perform usual activities ☐ Not sure

1E. Clinical context

Who is being assessed?

☐ Adult or adolescent ☐ Child under 12 ☐ Adult aged 65 or older

Could a medicine, substance, withdrawal, or recent dose change be relevant?

☐ No plausible contributor ☐ Yes or possibly ☐ Not reviewed

Include sedatives, dopamine-blocking drugs, stimulants, decongestants, anticholinergics, alcohol, and non-prescribed substances when relevant.

Is there a relevant neurological, muscular, metabolic, cardiovascular, autoimmune, or sleep disorder?

☐ No known relevant condition ☐ Yes ☐ Not sure

What prior information is available?

☐ A previous examination or investigation ☐ Prior records but no clear explanation ☐ No useful prior assessment ☐ Not sure

Additional history and documentation

Record exact dates/times, witness details, relevant medication doses and changes, prior investigation reports, and the person’s baseline function.

Section 2: Interpreting the input form

Answer combinations generate a differential and an assessment pathway—not a diagnosis.

> **Precedence:** Emergency safety answers override every pattern below. Otherwise, the highest-urgency fully matched pattern takes precedence. If entries are incomplete, contradictory, or match no pattern, use the unresolved-information pathway.

Pattern 1: Voice change with bulbar or respiratory signs

Is there choking, nasal regurgitation, weak cough, or breathlessness? Yes

Urgent assessment pattern — Same day

Voice change with choking, weak cough, or breathlessness requires urgent bulbar and airway assessment.

Differential to review:

- Vocal-cord paresis, bulbar neuropathy, or motor neuron disorder

Action: Arrange same-day medical assessment. If symptoms are rapidly worsening or severe, call 911.

Pattern 2: Persistent structural-voice pattern

Which voice change is most prominent? Hoarse or rough
How persistent is it? Persistent beyond 2–4 weeks / Progressively worsening

Prompt clinical review pattern — Promptly

Persistent hoarseness requires laryngeal structural assessment before a neurological voice label.

Differential to review:

- Laryngeal structural, inflammatory, or neoplastic disorder

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Pattern 3: Task-specific dystonic or tremulous pattern

Which voice change is most prominent? Strained, tremulous, or wobbly
What changes the voice? Only with speaking or a specific vocal task

Structured clinical review pattern — Routine review

Task-specific strained or wobbly voice follows a laryngeal-dystonia/voice-tremor assessment after laryngoscopy.

Differential to review:

- Spasmodic dysphonia/laryngeal dystonia or voice tremor

Action: Arrange a routine in-person clinical review. New, severe, or worsening symptoms change this pathway.

Pattern 4: Fatigable voice pattern

What changes the voice? Worsens with prolonged speaking or later day
How persistent is it? Recurrent episodes / Progressively worsening

Prompt clinical review pattern — Promptly

Voice that fatigues with use needs junction, laryngeal, and bulbar evaluation.

Differential to review:

- Myasthenic, functional, or medication-related dysphonia
- Vocal-cord paresis, bulbar neuropathy, or motor neuron disorder

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Unresolved-information pathway: The entries need structured in-person characterization.

Prompt clinical review pattern — Promptly

Do not guess missing answers or convert uncertainty into reassurance. Document what is unknown, perform an in-person examination, clarify the timeline with a witness or records when available, and reassess if any new feature appears.

Action: Arrange an in-person medical or neurological review promptly, usually within days. Seek sooner care if the pattern changes.

Section 3: Clinical review

Diagnostic modules and focused investigation logic

The examination comes before a test list. Select investigations only after localization, urgency, comorbidity, pregnancy status, renal function, anticoagulation, and prior results have been considered.

3.1 Laryngeal structural, inflammatory, or neoplastic disorder

Discriminating features: Persistent hoarseness/roughness, pain, airway symptoms, smoking risk, or local ENT findings.

Logical investigations: ENT/laryngoscopic evaluation for persistent or progressive dysphonia; airway symptoms require urgent care.

3.2 Vocal-cord paresis, bulbar neuropathy, or motor neuron disorder

Discriminating features: Quiet/breathy or nasal voice with weak cough, swallowing symptoms, or other cranial/neuromuscular signs.

Logical investigations: Laryngeal and bulbar neurological examination; targeted imaging/electrodiagnostics according to associated deficits.

3.3 Spasmodic dysphonia/laryngeal dystonia or voice tremor

Discriminating features: Task-specific strained, strained-strangled, or wobbly voice after structural disease is excluded.

Logical investigations: ENT and neurological assessment with laryngoscopy and task-specific voice evaluation.

3.4 Myasthenic, functional, or medication-related dysphonia

Discriminating features: Fatigable voice or functional variability; inhaled steroids and other medicines may contribute.

Logical investigations: Fatigability and medication review, laryngoscopy, and junction testing when neurological clues support it.

Reassessment and documentation

- If the symptom pattern changes, repeat the safety screen and timeline rather than carrying forward an earlier interpretation.
- If a test is unrevealing but the deficit persists or progresses, revisit localization and seek specialist review; a normal result does not automatically end assessment.
- If symptoms resolve, document duration, completeness of recovery, recurrence, and any residual deficit. Resolved sudden focal symptoms can still require urgent vascular assessment.
- If the history and examination conflict, obtain collateral information and in-person review rather than forcing a single diagnostic label.

Selected references

Sources provide background standards and do not replace local emergency pathways or current specialist guidance. Accessed October 2026.

1. National Institute for Health and Care Excellence. (2019, updated 2023). *Suspected neurological conditions: recognition and referral (NG127)*. https://www.nice.org.uk/guidance/ng127