CHAPTER 3

Vertigo

Updated for urgent care practice, 2026

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INTRODUCTION

Dizziness is a common but nonspecific urgent care complaint. Patients may use the term to describe vertigo, presyncope, disequilibrium, medication effects, anxiety-related symptoms, or a systemic illness. Vertigo is an illusion of movement caused by asymmetry in vestibular tone; however, the urgent care clinician must first identify dangerous mimics, especially posterior circulation stroke, hemorrhage, cardiac disease, intoxication, infection, and trauma.

Current practice emphasizes a timing-and-triggers approach rather than relying only on whether dizziness is described as "spinning." Most acute presentations can be organized into acute vestibular syndrome, triggered episodic vestibular syndrome, or spontaneous episodic vestibular syndrome. This approach makes the bedside examination more accurate and helps decide which patients can be treated safely in urgent care and which require emergency department evaluation.

PRESENTATION

- Dizziness, vertigo, lightheadedness, imbalance, swaying, or a nonspecific "off" feeling
- Spinning, tilting, rocking, environmental motion, nausea, or vomiting
- Near syncope, palpitations, dyspnea, chest pain, diaphoresis, dehydration, or medication/substance exposure
- Falls, gait instability, severe imbalance, or inability to walk independently
- Headache, neck pain, diplopia, dysarthria, dysphagia, weakness, numbness, visual loss, facial symptoms, or new unilateral hearing loss

TRIAGE PEARLS

- Immediately screen for stroke, posterior circulation ischemia, hemorrhage, dissection, infection, cardiac disease, intoxication, and trauma.
- Assess vital signs, pulse rhythm, oxygen saturation, hydration status, glucose when altered or diabetic, pregnancy status when relevant, and orthostatic blood pressure when presyncope or volume depletion is plausible.
- Do not dismiss isolated dizziness as benign in older adults or in patients with vascular risk factors. Posterior circulation stroke may present with dizziness, vomiting, gait difficulty, or subtle ocular motor findings.
- Use EMS transfer for central neurologic signs, severe truncal ataxia, inability to walk unaided, new severe headache, acute neck pain or dissection concern, new unilateral hearing loss with acute continuous vertigo, syncope, chest pain, or unstable vital signs.

HISTORY PEARLS

- Classify the syndrome by timing and triggers:
    - Acute vestibular syndrome (AVS): abrupt onset, continuous dizziness/vertigo lasting hours to days, usually with nausea/vomiting, nystagmus, gait unsteadiness, and motion intolerance. Differential includes vestibular neuritis, labyrinthitis, and stroke.
    - Triggered episodic vestibular syndrome (t-EVS): brief, recurrent episodes provoked by head position or movement. Posterior canal BPPV is the most common cause.
    - Spontaneous episodic vestibular syndrome (s-EVS): recurrent episodes without a clear positional trigger. Differential includes vestibular migraine, Meniere disease, TIA, arrhythmia, panic symptoms, and medication effects.

- Ask about neurologic symptoms: diplopia, dysarthria, dysphagia, unilateral weakness or numbness, facial sensory change, visual field loss, severe imbalance, new headache, or inability to walk.
- Ask about ear symptoms: unilateral hearing loss, tinnitus, aural fullness, otalgia, otorrhea, vesicles, recent otitis media, or facial weakness.
- Ask about vascular and dissection clues: acute neck pain, occipital headache, recent minor trauma, manipulation, abrupt rotation/extension, coughing, sneezing, exertion, or connective tissue disease.
- Vestibular migraine is suggested by recurrent vertigo or dizziness with migraine history, photophobia, phonophobia, visual aura, motion sensitivity, or headache. Headache may be absent during the vestibular episode.
- Meniere disease is suggested by recurrent spontaneous vertigo episodes lasting 20 minutes to 12 hours with fluctuating unilateral aural symptoms and audiometric sensorineural hearing loss; it is rarely diagnosed definitively at the first urgent care visit.
- Medication/substance review should include aminoglycosides, chemotherapy, loop diuretics, anticonvulsants, antidepressants, sedatives, antihypertensives, anticholinergics, alcohol, cannabis, and other intoxicants.

PHYSICAL EXAM PEARLS

- Record vital signs and orthostatic measurements when presyncope, dehydration, bleeding, autonomic symptoms, or medication effect is plausible.
- Perform a focused neurologic exam: mental status, cranial nerves, visual fields, extraocular movements, speech, facial sensation and strength, limb strength, sensation, finger-to-nose, heel-to-shin, pronator drift, gait, and truncal stability.
- Observe spontaneous nystagmus straight ahead and in eccentric gaze. Direction-changing gaze-evoked, vertical, or pure torsional nystagmus is concerning for a central lesion.
- Perform otoscopy and bedside hearing screen. New unilateral hearing loss in AVS raises concern for anterior inferior cerebellar artery stroke as well as labyrinthitis.
- Examine the neck for trauma, range of motion, focal pain, and neurologic symptoms provoked by movement; do not manipulate the neck if dissection is suspected.

TABLE 1. URGENT CARE TIMING-AND-TRIGGERS FRAMEWORK

Syndrome	Typical pattern	Urgent care focus
Acute vestibular syndrome (AVS)	Continuous vertigo/dizziness for hours to days with nausea/vomiting, spontaneous nystagmus, gait unsteadiness, and head-motion intolerance.	Assess gait, nystagmus, hearing, neurologic signs, stroke risk. HINTS/HINTS+ only if trained and only when spontaneous nystagmus is present.
Triggered episodic vestibular syndrome (t-EVS)	Brief episodes provoked by position change, rolling in bed, looking up, or bending.	Dix-Hallpike for posterior canal BPPV; supine roll test for horizontal canal BPPV; treat with canalith repositioning.
Spontaneous episodic vestibular syndrome (s-EVS)	Recurrent episodes without a clear positional trigger; symptoms may last minutes to hours.	Consider vestibular migraine, Meniere disease, TIA, arrhythmia, medication effects, and panic symptoms. Escalate if vascular or neurologic red flags are present.

TESTING PEARLS

Urgent care testing should be targeted. The key decision is whether the presentation can be safely managed as peripheral vertigo or requires emergency evaluation.

TABLE 2. TESTS FEASIBLE IN URGENT CARE

Test/exam	When useful	Pearl
Dix-Hallpike	Brief triggered positional vertigo.	Positive posterior canal BPPV: transient upbeat-torsional nystagmus after brief latency.
Supine roll test	Suspected horizontal canal BPPV or positional history with negative Dix-Hallpike.	Horizontal nystagmus suggests horizontal canal involvement.
Gait/truncal stability	All patients with acute vertigo or imbalance.	Inability to sit or walk unaided is a central red flag.
Focused neurologic exam	All dizzy patients, especially AVS or vascular risk.	Any focal deficit warrants ED evaluation.
Otoscopy and hearing screen	Aural symptoms, otalgia, AVS, infection concern.	New unilateral hearing loss with AVS is not automatically benign.

Test/exam	When useful	Pearl
ECG	Presyncope, syncope, palpitations, chest pain, dyspnea, older age, cardiac history, QT-risk drugs.	Look for arrhythmia, ischemia, conduction disease, or QT prolongation.
Glucose/pregnancy/labs	Altered mental status, diabetes, dehydration, pregnancy possibility, infection, anemia, renal/electrolyte concern.	Routine labs rarely diagnose isolated vertigo; order based on history and exam.

- Do not routinely order neuroimaging for typical posterior canal BPPV diagnosed by Dix-Hallpike; treat with a canalith repositioning maneuver.
- Non-contrast head CT is insensitive for posterior fossa ischemia and should not be used to "rule out" posterior circulation stroke in AVS. If central vertigo, TIA, or dissection is suspected, transfer for ED evaluation and advanced imaging.
- Formal audiometry, vestibular evoked myogenic potentials, caloric testing, videonystagmography, and MRI are generally specialty or ED tests rather than routine urgent care tests.

DIAGNOSIS PEARLS

TABLE 3. CLINICAL FEATURES THAT HELP DIFFERENTIATE PERIPHERAL AND CENTRAL VERTIGO

Feature	Peripheral pattern	Central concern
Onset/pattern	Sudden; often positional or postviral; may be episodic.	Continuous AVS with vascular risk, new severe headache/neck pain, or spontaneous neurologic symptoms.
Nystagmus	Unidirectional horizontal-torsional; suppresses with fixation; fatigues in BPPV.	Direction-changing, vertical, pure torsional, or nonfatiguing nystagmus.
Gait	Able to stand/walk, though symptomatic.	Severe truncal ataxia or inability to walk unaided.
Hearing	May occur in labyrinthitis, Meniere disease, or other inner ear disorders.	New unilateral hearing loss with AVS may indicate AICA ischemia.
Neurologic symptoms	Absent.	Diplopia, dysarthria, dysphagia, weakness, numbness, visual loss, limb ataxia, skew deviation.

- BPPV: brief triggered positional vertigo with characteristic positional nystagmus. Posterior canal disease is treated with Epley maneuver; horizontal canal disease requires different repositioning techniques.
- Vestibular neuritis: continuous AVS without hearing loss, often after viral symptoms. Stroke exclusion requires correct syndrome recognition, gait assessment, and trained eye-movement testing when available.
- Labyrinthitis: continuous vertigo with hearing loss, often after viral illness or otitis media. Because new hearing loss with AVS can also occur with AICA stroke, disposition should account for vascular risk and neurologic findings.
- Vestibular migraine: recurrent vertigo/dizziness lasting minutes to hours, often with migraine features, motion sensitivity, or migraine history; headache may be absent.
- Meniere disease: recurrent spontaneous vertigo with fluctuating unilateral aural fullness, tinnitus, and hearing loss; outpatient ENT/audiology evaluation is usually needed for confirmation.
- Ramsay Hunt syndrome: otalgia, vesicles, facial weakness, and vestibular symptoms from herpes zoster oticus; consider early antiviral and corticosteroid therapy and ENT/ophthalmology input when facial weakness affects eye closure.

HINTS/HINTS+ PEARLS

- HINTS/HINTS+ applies only to acute vestibular syndrome with continuous symptoms and spontaneous nystagmus. It should not be used for brief positional vertigo, resolved symptoms, presyncope, nonspecific dizziness, or patients without spontaneous nystagmus.
- Use HINTS/HINTS+ in urgent care only if the clinician is trained in eye-movement examination. Otherwise, concerning AVS should be transferred rather than reassured.
- Central HINTS/HINTS+ features include normal head impulse in AVS, direction-changing nystagmus, skew deviation, or new unilateral hearing loss. Any central or equivocal result warrants ED evaluation.

TREATMENT PEARLS

TABLE 4. URGENT CARE TREATMENT SUMMARY

Condition	Urgent care treatment	Avoid/pitfall
Posterior canal BPPV	Treat at the visit with Epley maneuver; reassess symptoms and gait.	Do not default to meclizine alone; avoid routine imaging when presentation is typical.
Vestibular neuritis	Hydration, short-term antiemetic/vestibular suppressant for severe symptoms, early mobilization. Consider short corticosteroid course within 72 hours using shared decision-making.	Avoid prolonged vestibular suppressants; antivirals are not routine without herpes zoster evidence.
Labyrinthitis/otitis complication	Treat infection when present; manage nausea; consider ED/ENT for severe illness, mastoiditis, neurologic signs, or sudden hearing loss.	Do not assume all vertigo plus hearing loss is benign inner ear disease.
Vestibular migraine	Supportive acute migraine care when no red flags: hydration, antiemetic, NSAID/acetaminophen when appropriate; arrange follow-up for recurrent episodes.	Avoid labeling as anxiety before evaluating neurologic, otologic, medication, and cardiac causes.
Meniere disease	Symptomatic treatment for acute nausea/vertigo; arrange ENT/audiology follow-up.	Do not make a definitive diagnosis at first presentation without recurrent pattern and audiometry.

- Meclizine 12.5-25 mg PO up to three times daily as needed is commonly used for severe acute vertigo, but it is sedating and anticholinergic; use the shortest practical duration, especially in older adults.
- Ondansetron is useful for nausea/vomiting but is not a vestibular suppressant. Promethazine and prochlorperazine may be effective but are more sedating and have anticholinergic or extrapyramidal risks.
- Benzodiazepines are not first-line for vertigo and should generally be avoided in older adults, fall-risk patients, substance use risk, sleep apnea, and anyone who must drive or work in safety-sensitive roles.
- Vestibular rehabilitation and early mobilization promote compensation when symptoms persist beyond the acute phase.

DISPOSITION PEARLS

TABLE 5. URGENT CARE DISPOSITION

Disposition	Criteria
Emergency department/EMS	Central neurologic sign; severe truncal ataxia; inability to walk unaided; new severe headache; acute neck pain/dissection concern; new unilateral hearing loss with AVS; central/equivocal HINTS+; syncope, chest pain, unstable vital signs, dehydration requiring higher-level care, or suspected stroke/TIA.
Urgent ENT/ED	Sudden sensorineural hearing loss; Ramsay Hunt syndrome with facial weakness or eye closure risk; mastoiditis or intracranial otitis complication; severe refractory vomiting; suspected perilymphatic fistula or temporal bone injury.
Outpatient urgent care management	Classic BPPV successfully treated with repositioning and no red flags; mild peripheral vestibular symptoms with safe ambulation, stable vitals, reliable follow-up, and no concerning neurologic or otologic findings.
Specialty follow-up	Recurrent BPPV, atypical positional nystagmus, vestibular migraine, suspected Meniere disease, persistent unilateral tinnitus/hearing loss, persistent imbalance, or recurrent spontaneous episodes concerning for TIA.

MEDICOLEGAL PEARLS

- Document the timing-and-triggers syndrome, neurologic review of systems, gait assessment, nystagmus description, bedside hearing screen, and reason for urgent care management versus ED transfer.
- Document whether HINTS/HINTS+ was performed, the clinician's training/comfort with the exam, and each element rather than writing only "HINTS negative."
- Document discussion that head CT does not reliably exclude posterior circulation stroke when transfer or imaging decisions are considered.
- Document medication sedation/fall-risk counseling and work/driving restrictions when vestibular suppressants, antiemetics, or benzodiazepines are prescribed.

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