

GRACE-3: Acute Dizziness and Vertigo in the Emergency Department



RECOMMENDATIONS

1. Emergency clinicians should receive training for diagnosing and treating patients with acute dizziness

DIAGNOSIS OF ACUTE VESTIBULAR SYNDROME

[Acute Onset of Persistent, Continuous Dizziness]

2. In patients with nystagmus, trained clinicians should use HINTS testing to distinguish central (stroke) from peripheral (inner ear, usually vestibular neuritis) diagnoses. (High certainty of evidence)
3. In patients with nystagmus, assess hearing by finger rub to distinguish central from peripheral diagnoses. (Moderate certainty of evidence)
4. In patients without nystagmus, assess severity of gait unsteadiness to distinguish central from peripheral diagnoses. (Moderate certainty of evidence)
5. In patients with or without nystagmus, do not routinely use non-contrast brain CT or CTA. (High certainty of evidence)
6. In patients with or without nystagmus, do not routinely use MRI or MRA as the first-line diagnostic test if a clinician trained in HINTS is available. (High certainty of evidence)
7. In patients whose HINTS result is central or equivocal, use MRI/MRA to distinguish between central and peripheral diagnoses. (High certainty of evidence)

DIAGNOSIS OF THE SPONTANEOUS EPISODIC VESTIBULAR SYNDROME

[Episodes of Dizziness Not Brought On By Any Clear Trigger]

8. Clinicians should perform a history and physical exam with emphasis on cranial nerves, visual fields, eye movements, limb coordination, and gait assessment to distinguish between central (TIA) and peripheral (vestibular migraine, Menière disease) diagnoses.
9. Do not use CT to distinguish between central and peripheral diagnoses. (Moderate certainty of evidence)
10. If concern for TIA, use CTA or MRA to diagnose large vessel pathology. (Moderate certainty of evidence)

DIAGNOSIS OF THE TRIGGERED EPISODIC VESTIBULAR SYNDROME

[Brief Episodes of Dizziness Clearly Triggered by Something, e.g., Moving the Head]

11. Use the Dix-Hallpike test to diagnose posterior canal BPPV. (Moderate certainty of evidence)
12. Do not routinely use CT or CTA. (Moderate certainty of evidence)
13. For posterior canal BPPV by a positive Dix-Hallpike test, do not routinely use MRI or MRA. (Moderate certainty of evidence)

TREATMENT OF ACUTELY DIZZY PATIENTS IN THE ED

14. Use shared decision-making with patients regarding short-term steroid treatment for vestibular neuritis within the first three days of symptoms. (Very low certainty of evidence)
15. Use the Epley maneuver for patients diagnosed with posterior canal BPPV. (Strong certainty of evidence)

