## **Acute Dizziness**

**Subjective label** not meaningfully correlated w/ symptom source – don't let *room spinning* vs. *lightheaded* vs. *unsteady*, etc. guide exam.

**Timing**: Are symptoms **persistent** or **episodic**?

**Trigger**: Is there a movement/position *trigger*, or are symptoms *spontaneous*? Ask clearly whether symptoms are present at rest.

If patient has spontaneous, persistent dizziness AND nystagmus, this is **Acute Vestibular Syndrome (AVS)** – use **HINTS** cluster to differentiate peripheral from central source:

	Peripheral	Central
Head Impulse	Abnormal	Normal
Nystagmus	Unidirectional Horizontal	Direction-changing / vertical/ torsional
Test of Skew	No Skew	Vertical Skew

In a patient with persistent dizziness and nystagmus, unless **every** item of this cluster is consistent with the **Peripheral** pattern noted, a **Central cause** must be suspected.

**Acute unilateral hearing loss** is benign in 50-60% of cases, but can be caused by AICA stroke. Treat as a **red flag**.

10-25% of AVS is caused by stroke. Most cases are neuritis.

**Head Impulse** testing can be challenging. Look for patient's eyes to move with head on impulse, followed by corrective saccade back to target. Ease in to the test by first having patient actively turn head while maintaining gaze fixation.

**Triggered, Episodic Dizziness**: symptoms are not present at rest, but provoked by movement or specific position.

Causes include **BPPV** and **Orthostatic Hypotension**.

Most BPPV involves the posterior semicircular canal. The provocation test for PC BPPV is the **Dix-Hallpike**. The treatment maneuver is the **Epley**.

In the ED, horizontal canal BPPV is almost as common as PC BPPV. The test is the **Supine Roll**. The simplest treatment is the **Gufoni**.

**HINTS** testing is not used in Triggered, Episodic dizziness syndromes.

**Spontaneous, Episodic Dizziness** is defined by symptoms that occur without movement or position trigger.

Spontaneous, transient symptoms can occur in setting of arrhythmia and hypoperfusion. **TIA** is a more common cause.

Meniere's syndrome is a rare cause, and dizziness and nystagmus are accompanied by fluctuating hearing loss.

Vestibular migraine is a more common diagnosis of exclusion.

Visit PTMeasures.com for more clinical resources, or use this QR code:

**HINTS** is more reliable than MRI within 48 hrs. of onset. Use HINTS only in Acute Vestibular Syndrome.

Absence of focal neuro deficits does not rule out stroke – only 20% of AVS caused by stroke features a focal deficit.

If **Head Impulse is equivocal** and cluster
is otherwise c/w
peripheral pattern –
treat as CVA if patient
can't stand + walk
unsupported.

**Vertebral artery dissection** preceded by trauma in only half of cases.

Nystagmus of peripheral source beats toward more active side: **Right** horizontal nystagmus caused by a peripheral hypofunction will feature abnormal **Left** Head Impulse.

Peripheral hypofunction / neuritis can still be dangerous (e.g. bacterial otitis media).

Abnormal Head Impulse is occasionally caused by **AICA stroke**; use whole HINTS cluster in AVS.

**Gaze fixation** may aid exam. Peripheral nystagmus should dampen a little with focus on visual target.

