LR 02
CHEAT SHEET

Bedside Examination of the Dizzy Patient

A structured, evidence-based approach for general clinicians

► Why bedside examination matters

Bedside exam changes or confirms the diagnosis in >80% of dizzy patients. HINTS outperforms early MRI for posterior-circulation stroke in the first 24–48 h. Do the exam before the imaging.

HINTS Exam — The 3-step oculomotor screen for AVS

► **HI — Head Impulse.** In AVS, corrective saccade = peripheral (reassuring). Normal HIT in vertiginous patient = central.
► **N — Nystagmus.** Unidirectional horizontal (Alexander's Law) = peripheral. Direction-changing, vertical or torsional = central.
► **TS — Test of Skew.** Alternate cover test. Any vertical corrective movement = brainstem skew = central.
► **+ Finger-rub hearing.** New unilateral loss in AVS → consider AICA stroke (HINTS-plus).

► HINTS is only valid in active AVS

Continuous vertigo + spontaneous nystagmus AT TIME OF EXAM. Do NOT apply to episodic or resolved vertigo — false reassurance.

HINTS Interpretation — Any central finding = stroke until proven otherwise

Component	Peripheral	Central
Head Impulse	Abnormal (corrective saccade)	Normal
Nystagmus	Unidirectional horizontal	Direction-changing / vertical / torsional
Test of Skew	Absent	Present (vertical refixation)

Positional Testing — For triggered episodic vertigo (seconds)

► **Dix-Hallpike.** 45° head turn, lie supine w/ pillow under shoulders, head 20° below horizontal. Positive = latent upbeat-torsional nystagmus, crescendo–decrescendo, fatigable → posterior canal BPPV (ipsilateral).
► **Supine Roll Test.** Head 30° flexed, roll 90° each side. Geotropic (stronger side = affected) or apogeotropic (cupulolithiasis, weaker side affected) → lateral canal BPPV.
► **Atypical nystagmus.** Pure downbeat, sustained, non-fatiguing, direction-changing → central positional nystagmus — neuroimaging.

► Cannot stand unaided with acute continuous vertigo

Cerebellar stroke until proven otherwise. Urgent neuroimaging (CT then MRI-DWI) regardless of other findings.

Bedside Examination — *Orthostatic BP, Focused Neuro, Red Flags & Referral*

Orthostatic BP — Lying → 1 min → 3 min (→ 5 min if delayed OH suspected)

Finding	Interpretation
Drop SBP ≥20 mmHg or DBP ≥10 mmHg within 3 min of standing	Orthostatic hypotension
HR ↑ ≥30 bpm (≥40 in teens) with no BP drop, ≥3 mo symptoms	POTS
BP drop without compensatory tachycardia	Neurogenic OH — PD, MSA, diabetic autonomic neuropathy
Delayed drop after 3 min	Delayed OH — missed if testing stops early

Bedside Examination by Diagnostic Category (TiTrATE-driven)

AVS — Acute Vestibular Syndrome

Continuous vertigo, active now. HINTS-plus + gait + focused neuro. Central → urgent MRI-DWI.

s-EVS — Spontaneous Episodic

Interval exam often normal. Consider vestibular migraine, Ménière's, TIA. Full neuro-otological if red flags.

t-EVS — Triggered Episodic

Dix-Hallpike both sides; if negative, supine roll. Positive → therapeutic manoeuvre (Epley / BBQ roll).

Chronic / orthostatic / visual

Lying-standing BP at 1, 3 (and 5) min. Visual motion provocation, tandem gait, Romberg.

Red Flags — Refer / Investigate Urgently

► Central signs — act now

- Direction-changing, vertical or torsional nystagmus • Normal head impulse in AVS • Skew deviation on cover test
- New severe ("thunderclap") headache • Diplopia, dysarthria, dysmetria, hemiparesis, sensory disturbance
- Inability to stand or walk disproportionate to vertigo • Isolated vertigo + vascular risk factors (ABCD2 ≥4)
- New unilateral hearing loss with AVS → AICA stroke until proven otherwise

► Ear / audiology emergencies

- Sudden SNHL (>30 dB over 3 frequencies within 72 h) ± vertigo → same-day ENT; oral prednisolone 1 mg/kg within 72 h.

When to Refer to a Vestibular Physician

- ► **Diagnostic uncertainty** after structured history and bedside exam.
- ► **Recurrent / resistant BPPV** — >3 episodes/year, failed 2 Epleys on different days, or atypical nystagmus.
- ► **Suspected Ménière's** — for confirmation (audiometry, VFTs) and longitudinal management.
- ► **Progressive unilateral hearing loss with imbalance** — exclude vestibular schwannoma.
- ► **Chronic dizziness >3 months** without clear structural cause — consider PPPD; VR + SSRI / SNRI + CBT.
- ► **Bilateral vestibular hypofunction** (presbyvestibulopathy, aminoglycoside, autoimmune).