

Bedside Clinical Examination in Vestibular Medicine

Clinician Quick Reference • Australian Dizziness Clinics • 2026

13-STEP BEDSIDE EXAMINATION SEQUENCE

Step	Test	Purpose
1	Nystagmus (room light → Frenzel goggles)	Baseline; fixation suppression
2	Bedside head impulse test (bHIT)	VOR gain; lateralise lesion
3	HINTS (if AVS)	Peripheral vs. central acute vestibular syndrome
4	Dix-Hallpike (bilateral)	Posterior canal BPPV
5	Supine roll test	Lateral canal BPPV
6	Head shaking nystagmus (HSN)	Unilateral vestibular hypofunction
7	Vibration-induced nystagmus (VIN)	Lateralise unilateral peripheral loss
8	Ocular motor exam	Smooth pursuit, saccades, skew, gaze-holding
9	Cerebellar screen (FNF, RAM, heel-shin)	Mandatory in all dizzy patients
10	Dynamic visual acuity (DVA)	Functional VOR measure
11	Otoscopy + tuning forks	Middle ear; conductive vs. SNHL
12	Orthostatic BP (supine → 1, 3, 5 min)	Orthostatic hypotension / POTS
13	Gait + Romberg (± cervical assessment)	Balance integration; CGD if indicated

HINTS — ACUTE VESTIBULAR SYNDROME (AVS)

Component	Peripheral (Safe)	Central (Stroke — Refer)
Head Impulse (HIT)	Abnormal (corrective saccade)	Normal — DANGER SIGN
Nystagmus	Direction-fixed, horizontal-torsional	Direction-changing or purely vertical
Test of Skew	Absent vertical skew deviation	Vertical skew deviation present

♦ **HINTS-Plus:** add acute unilateral hearing loss as a fourth element. HINTS outperforms early DWI-MRI in the first 24–48 hours. Normal HIT + any of: skew, direction-changing nystagmus, or vertical nystagmus = central AVS until proven otherwise.

NYSTAGMUS — KEY PATTERNS

Pattern	Interpretation
Direction-fixed horizontal-torsional	Peripheral vestibular (suppressed by fixation)
Direction-changing (gaze-evoked)	Central — cerebellar / brainstem
Pure vertical (upbeat / downbeat)	Central — never peripheral
Fixation suppression present	Peripheral pattern
Fixation suppression absent	Central pattern

POSITIONAL TESTING — BPPV VS. CENTRAL

Feature	BPPV (Peripheral)	Central Positional
Latency	2–20 seconds	Immediate (no latency)
Duration	< 60 seconds	Persistent (> 1 min or continuous)
Fatigability	Yes — diminishes on repeat	No — unchanged
Direction	Torsional-upbeat (D-H); horizontal (roll)	Pure vertical or atypical

TUNING FORK TESTS (512 HZ)

Test	Finding	Interpretation
Weber	Lateralises to affected ear	Conductive hearing loss
Weber	Lateralises to better ear	Sensorineural hearing loss (SNHL)
Rinne	AC > BC (Rinne +ve)	Normal or SNHL pattern
Rinne	BC > AC (Rinne -ve)	Conductive hearing loss (ipsilateral)

ORTHOSTATIC BP — 7-STEP PROTOCOL

Timepoint	Diagnostic Threshold
Supine (2 min rest)	Baseline
Standing 1 min	Drop ≥ 20 mmHg systolic OR ≥ 10 mmHg diastolic = OH
Standing 3 min	Sustained drop confirms classical OH
Standing 5 min	Late or delayed OH if drop only here
HR change	> 30 bpm rise without BP drop = POTS (age < 50)

CEREBELLAR SCREEN — ROUTINE IN EVERY DIZZY PATIENT

- **FNF (finger-nose-finger):** Dysmetria, intention tremor, past-pointing
- **Rapid alternating movements:** Dysdiadochokinesia — ipsilateral cerebellar hemisphere
- **Heel-shin:** Ataxia; decomposition of movement
- **Gaze-evoked nystagmus:** Direction-changing — floccular/gaze-holding failure
- **Rebound nystagmus:** Highly specific for cerebellar disease

♦ **Document every component:** nystagmus direction/fixation, bHIT side, HINTS result, positional tests bilateral, HSN, VIN, ocular motor, cerebellar, DVA, otoscopy, tuning forks, BP at all timepoints, gait/Romberg. Undocumented HINTS in a missed stroke is a preventable medico-legal failure.