

**Neurology Section Roundtable
Vestibular Special Interest Group**

The Basics and Beyond: What Should Entry Level Education Be For Vestibular Rehabilitation

The following list is a combination of suggestions from two separate groups at the meeting:

HISTORY / INTERVIEW OF THE PATIENT

1. Basic vestibular history
2. Standard history with questions to assess risk for falls/imbalance/dizziness/orthostatic hypotension
3. Systems review
4. Extract appropriate history to direct objective exam.
5. When to change clinical paths.
6. How and why we ask the questions.
7. Peripheral vs. Central etiologies
8. Baloh's questions regarding symptoms: frequency, intensity, duration, onset, provoking factors.
9. DHI
10. ABC
11. Standardized algorithm classification of dizzy patients

PHYSICAL EXAMINATION

1. Basic vestibular and oculomotor exam
(without specialized equipment such as frenzel lenses)
 - a) Spontaneous nystagmus
 - b) Gaze holding
 - c) Smooth pursuit
 - d) Voluntary saccades
 - e) VOR to slow head rotation
 - f) Head thrust
 - g) VOR cancellation
2. Dynamic Visual Acuity
3. Motion Sensitivity Quotient
4. Hallpike-Dix maneuver
5. Sidelying test for BPPV
6. Other alternatives to Hallpike (eg tilt table)
7. Roll test for BPPV *
8. Vertebral artery test in sitting
9. Cervical screen
10. Cranial nerve screen including extraocular ROM

11. LE sensation, ROM strength
12. Modified CTSIB using foam
13. Tandem stance EO, EC
14. Unilateral stance EO, EC
15. Dynamic Gait Index
16. Gait velocity during first trial of DGI
17. Fukuda stepping
18. Nudge test
19. Berg Balance Scale
20. Tinetti
21. Tandem Gait
22. Timed up and go
23. Five times sit to stand
24. Functional reach
25. Balance strategy by observation

TREATMENT / INTERVENTIONS

Mechanical:

1. Epley maneuver (aka canalith repositioning maneuver, particle repositioning maneuver).
2. Semont liberatory maneuver
3. Brandt Daroff exercise.

Sensory organization:

1. Altering surface and visual conditions
2. Dual tasks
3. Head movement
4. Sensory integration exercise

Oculomotor:

1. VOR x 1
2. VOR x 2
3. VOR cancellation
4. Imaginary targets
5. Two targets

Habituation exercises:

1. Cooksey/Cawthorne (historical perspective)
2. Repeated provocative head motions

Static balance/limits of stability:

1. Choice of strategy

Functional activities

VESTIBULAR DISORDERS / CONDITIONS

Presentation of acute vs chronic stages of specific conditions where appropriate

1. Vestibular neuritis
2. Labyrinthitis
3. Unilateral vestibular loss
4. Bilateral vestibular loss
5. Benign Paroxysmal Positional Vertigo
6. Perilymphatic fistula
7. Meniere's disease, endolymphatic hydrops
8. Migraine related vertigo
9. Central vestibular dysfunction
10. Acoustic Neuroma (schwannoma)

MECHANISMS OF RECOVERY

1. Time course of recovery
2. Compensation, adaptation, substitution

CASE STUDIES

INCLUDE PRACTICE PATTERN 5A INTO CURRICULUM

NORMATIVE MODEL

IDEAL NUMBER OF LECTURE/LAB HOURS: 8-12 hours lecture and lab

MINIMUM NUMBER OF LECTURE/LAB HOURS: 4hours lecture; 4 hours lab