The Dizzy and Imbalanced Patient
Part II: Evaluation
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Note to Participants: There are interactive pop-up questions throughout this lecture. If you choose to pause the lecture and return at a later time, a natural break time would be after answering the interactive questions. (You are able to pause at any time and the presentation will “remember” where you were. It’s just a more natural time to pause after the interactive questions.) For your convenience, this outline reflects where/when within the lecture the interactive questions occur.

This lecture has 136 slides and is 106 minutes in duration.

I. Cervicogenic dizziness
   A. Definition of cervicogenic dizziness
   B. Whiplash injuries
      1. Cervical pain
      2. Otolaryngology test results post-whiplash
      3. Problems with
         a. Oculomotor function
         b. Postural control
         c. Muscle function
         d. Somatosensation
         e. Joint position sense
   C. Patients with persistent symptoms after a whiplash injury should be evaluated for:
      1. Vestibular abnormalities, both central and peripheral
      2. Smooth pursuit accuracy
      3. Postural control
      4. Neck muscle function, including strength and endurance, flexors and extensors
      5. Head-neck repositioning

Interactive Questions: Slide 32 @ 20 minutes

II. Migrainous vertigo
   A. Cervicogenic dizziness implies there is a problem in the cervical spine causing the dizzy symptoms
   B. Differentiating between cervicogenic dizziness and migrainous vertigo.

III. Recognizing central, peripheral and cervicogenic dizziness
   A. Signs and symptoms of
      1. Vestibular disorders
2. Cervicogenic dizziness
3. Vertebrobasilar disorder

B. Character of dizziness
C. Differential diagnosis
   1. Central
   2. Peripheral
C. Key history in cervicogenic dizziness
D. Time course of dizziness

Interactive Questions: Slide 45 @ 31 minutes

IV. Examination of the patient with dizziness
A. Begin with
   1. Ruling out upper cervical hypermobility
   2. Observation
   3. Systems review
   4. Patient history
B. Physical examination
   1. Anatomical review of cervical spine
   2. Sharp-Purser test
   3. Alar ligament test
   4. Vertebral artery testing
   5. VBI literature review

Interactive Questions: Slide 72 @ 53 minutes

V. Distinguishing between central and peripheral vestibular dysfunction
A. Review of differential diagnostic process for central and peripheral dizziness
B. Physical examination
   1. Central signs
   2. Vestibular signs
C. Vestibular assessments
   1. Assessment of BPPV
      a. Dix-Hallpike maneuver
      b. Roll test
   2. FAQs
   3. Head thrust test
      a. Normal test
      b. Abnormal test
      c. False negative
   4. Head shaking nystagmus test
   5. Dynamic visual acuity test

Interactive Questions: Slide 111 @ 80 minutes
VI. Cervicogenic dizziness is a diagnosis of exclusion
   A. Determining the cause of the dizziness.
      1. Do symptoms resolve with manual cervical traction?
      2. Is the problem provoked by head movement or position, versus neck movement or position?
         a. By rotation? Which kind?
         b. By extension?

VII. Summary
   A. Algorithm of thought process to determine cause(s) of dizziness.
   B. Application of process to case study.

Interactive Questions: Slide 134 @ 104 minutes
Bibliography

Articles


31. Treleaven J. Sensorimotor disturbances in neck disorders affecting postural stability, head and eye


47. Alund M, Ledin T, Odkvist L, Larsson SE. Dynamic posturography among patients with common


**Books and book chapters**
