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 122 slides and is 137 minutes in duration.

Notes

I. The differential process
  A. Four steps in the differential diagnostic process
      1. Create a list of possible or potential diagnoses that fit the history
      2. Determine if the patient is appropriate for therapy
      3. Differentiate central from peripheral, consider cervicogenic dizziness
  B. Step 1: Assess the possible causes of dizziness; organize using the mnemonic **TIM VaDeTuCoNe** (with example diagnoses)
      1. **T**rauma: TBI, cervicogenic dizziness; fistula, BPPV
      2. **I**nflammation (septic or aseptic): labyrinthitis, neuronitis, otitis media, sinus infections
      3. **M**etabolic: medication side effects, toxin exposure
      4. **V**ascular: VBI; orthostatic hypertension, atrial fibrillation
      5. **D**egenerative: BPPV; TMJ
      6. **T**umor: acoustic neuroma; brain tumor
      7. **C**ongenital: fistula
      8. **N**eurogenic: psychiatric disorders (anxiety); migraines, MS, TIA, phobic postural vertigo
  C. Step 2: Determine if patient is appropriate to treat: look for red flags
      1. Benign causes of dizziness
      2. Serious (refer for workup)
      3. Signs of systemic diseases, infections processes. vascular causes
      4. Central nervous system: new onset or undiagnosed; changing neurologic status
      5. Headache?
      6. Head is not firmly attached to neck: ligamentous instability
      7. Fractures ruled out
      8. Vestibular disorders not appropriate for therapy: undiagnosed central causes
      9. Peripheral causes

        10. Tumor: acoustic neuroma, fistula

        11. Yellow flags (proceed with caution): psychiatric, anxiety disorders

    D. Step 3: Differentiate between central and peripheral vestibular disorders.

        1. Central

            a. Originate in the CNS

            b. Nystagmus

        2. Peripheral

    E. Step 4: If it isn't central or peripheral, consider cervicogenic dizziness

Interactive Questions – slide 45 @ 39 minutes

II. Postural control: mechanisms of balance, origins of impairments, common diagnoses

    A. Five components to maintaining postural control: All must be evaluated.

        1. Input

        2. Afferent pathways

        3. Processing

        4. Efferent pathways

        5. Output

    B. Common vestibular system pathologies

        1. Benign paroxysmal peripheral vertigo (BPPV)

        2. Menière's disease

        3. Labyrinthitis

        4. Ototoxic vestibular loss

    C. Vestibular ocular reflex (VOR)

Interactive Questions – slide 89 @ 97 minutes

III. Imbalance in the elderly

    A. Falling is not an inevitable consequence of aging.

    B. Multifactorial risks for falling.

    C. Best tests for predicting the risk of falls

Interactive Questions – slide 119 @ 133 minutes