Interesting Dizzy Cases

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Case 1
- A 30 year old Chicago Park District Worker came in because of dizziness.
- He fell off of a truck two years ago, hit his head, and now he becomes very dizzy whenever he lies down.
- He has been sleeping in a chair for two years.
- What is the most likely reason for his positional vertigo?

Case 2
- A 55 year old worker at a local steel mill comes in because of dizziness and hearing disturbance. Every month or two, he has an attack in which one ear gets plugged up, he gets a loud roaring noise, and everything starts to spin for several hours.
- He is concerned that he may be unsafe to work.
- What is the most likely cause of his episodic symptoms?

Case 3
- A 60 year old diabetic was on peritoneal dialysis while waiting for a kidney transplant. She got peritonitis and was given an antibiotic to put into the dialysate. After 2 weeks, her balance became much worse and she noticed that she couldn’t see very well when her head was moving.
- What is the diagnosis? Treatment?

Case 4
- A 75 year old diabetic awoke one morning dizzy.
- Accompanying the vertigo was a droopy eye lid, and clumsiness on one side. There was also dysphagia and a hoarse voice. There were no hearing symptoms.
- What artery is the most likely one to cause this stroke?
History

- 36-year-old white female who complains of imbalance, as well as attacks of dizziness. She has had five or six attacks since August 1999, the most recent has continued to the present day, beginning May 4, 2006. Her dizziness is not so much a spinning sensation as a rocking feeling. This is accompanied by jumping vision, sometimes when she is exposed to loud noise. She also has fullness in the left ear, clicking, ringing, and a heart beating in the left ear. She has been disabled since her most recent attack in May. She works as a spot welder. Things that trigger dizziness include standing up, rapid head movements, walking in a dark room, elevators, and complicated visual environments. Reading makes symptoms worse, and she can lose her balance while simply walking.
OKN

What do you think?

VEMP

What do you think now?

Valsalva

Other negative tests

- General exam is normal
- Negative Tullio test
- Negative fistula test
What do you think?

Superior Canal Dehiscence

• Temporal bone CT showed bilateral SCD, worse on L.
• Clues
  – History of noise sensitivity
  – Conductive hyperacusis
  – Asymmetrical VEMP
  – Valsalva induced nystagmus

Case

• 71 yo AA man with ataxia
• Onset 3 years ago, gradually worsening
• Formerly played drums for Buddy Guy
What do you think?

Eye video

Something else was moving too

OPM (oculo-palatal myoclonus)
- Fairly common disorder
- Pendular nystagmus
- Palatal myoclonus
- Triangle of Guillain Molleret

Case --
- 46-year-old white female
- Dizziness, as well as severe vomiting
- She vomits so much that she is unable to even keep down pills.
- Bilateral ringing, bilateral fullness, and bilateral ear pain.
- No hearing loss.
Case

Breast cancer metastasis to cerebellum. Treated with surgical resection followed by whole brain radiation and steroids.

Case

14 year old girl
- Very unstable gait
- Headaches
- Darting eyes

Overshoot dysmetria
- Usually cerebellar lesion – fastigetal nucleus
- Occasionally paretic eye fixation
- Never peripheral vestibular lesion

Opsoclonus
- “dancing eyes-dancing feet” pediatric syndrome
- Neuroblastoma
- Paraneoplastic syndrome
- West Nile

West Nile
- Chicago Epidemic started in 2003
- 20% mosquito’s on south side
- Change in # of cases of opsoclonus from 1/5 years to about 3/year
- Opsoclonus is sometimes a consequence of WN.
- Only 3% population has immunity to West Nile
Case – a type of CN

Non-vestibular spontaneous nystagmus the common variants

Latent Nystagmus

• Found in persons with congenital esotropia
• changes direction according to viewing eye (Cross-cover test)
• Viewing eye beats laterally
• Intent to view controls direction (pseudoscope)
• Always have “lazy” eye

Latent Nystagmus

Note “bizzare” increasing velocity waveform typical of CN. Some malingerers use LN

Congenital Nystagmus

• One/1000 population
• Present from early age
• Usually worse in light
• PT not useful
• Rehab significance is to avoid confusing it with central nystagmus or vestibular nystagmus.

Case another CN

In light
In dark

Case
The cause

• 30 year old alcoholic
• Decided to “end it all”
• Stood in chicago river in winter
• Brought in by police to ER
• Given large bolus of D5W

Nystagmus

• Smoking (slight – Nicotine causes UBN)
• SSRI’s (slight)
• Wernickes (rare)
• BPPV variants – debris on top of cupula instead of under it
• Vestibular neuritis variants (superior vestibular nerve)
• Central vertigo – Migraine

Case – iatrogenic dizziness

Case (patient DA)

• 43 y.o. F, episodes of dizziness for 5 years
• Attacks begin with headache, nausea, dizziness, and severe ear pain.
• About 3/month, lasting 2-3 days.
• Severe motion intolerance

Case Study (patient DA)

• Dizzy and Headaches
• Tinnitus in both ears
• Denies hearing loss
• Physical exam normal
• Audiogram, 3 caloric tests, MRI of brain normal
Patient drew this while waiting for appt.

What do you think?

dots in middle of vision

seemed to enlarge + burst into colors

colors then blurred into a mass + then formed an arc

Migraine Variants

- Complicated migraine is accompanied by a neurological deficit.
  - About 1% of migraine patients
  - About 25% of patients with migraine have “small vessel disease” on MRI.
  - Prevention is important here
Vibration Induced Nystagmus

- Unidirectional horizontal nystagmus strongly suggests contralateral vestibular lesion.
- Permanent nystagmus – never goes away
- Direction changing nystagmus is a normal variant.
- Vertical or torsional nystagmus is of uncertain meaning. Seems more common in BPPV.

Case

- 62 year old male (college professor)
- Gradual onset of intermittent dizziness
- Dizziness was positional, occurring primarily with inclining head upwards or downwards.
- Less commonly dizziness appeared with abrupt turning of the neck or while bearing down during a bowel movement
- Jogs 2 miles every day – feels fine

Rebound Nystagmus

- Nearly always cerebellar lesion
- Rarely congenital
- Method of separating out cerebellar GEN from sedative effect or congenital nystagmus

Eye movements sitting upright
Electronystagmography: caloric responses on the right were 34% weaker than on the left, with no significant directional preponderance.

Superior semicircular canal dehiscence on right

Physical examination revisited

- Primary-position torsional pendular nystagmus that was pulse-synchronous, with clockwise component corresponding to pulse upswing
  - Absent when supine
  - Present when sitting or standing
  - Suppressible with Valsalva maneuver
- Low-amplitude downbeating nystagmus, greater on lateral gaze, and with no positional modulation

More details

More movies
www.dizziness-and-balance.com