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Dizziness vs Vertigo
An ENT Perspective

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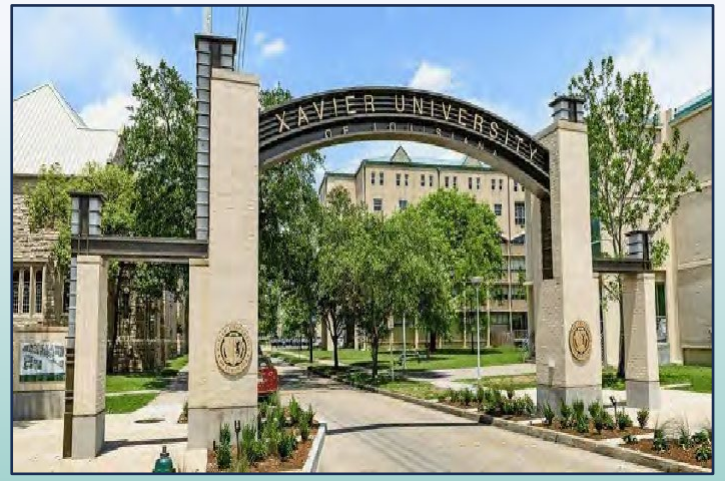
Objectives

- **Define and differentiate** between dizziness and vertigo using clinical terminology and patient-reported symptoms.
- **Classify types of dizziness** (e .g., pre syncope, dise quilibrium, psychogenic) based on history and physical exam findings.
- **Apply diagnostic frameworks** such as HINTS to evaluate patients presenting with dizziness or vertigo.
- **Perform and interpret bedside maneuvers** including the Dix-Hallpike and Epley maneuvers for diagnosing and treating BPPV.
- **Identify red flags** that suggest central causes of vertigo requiring urgent referral or imaging.

A Little Bit About Me



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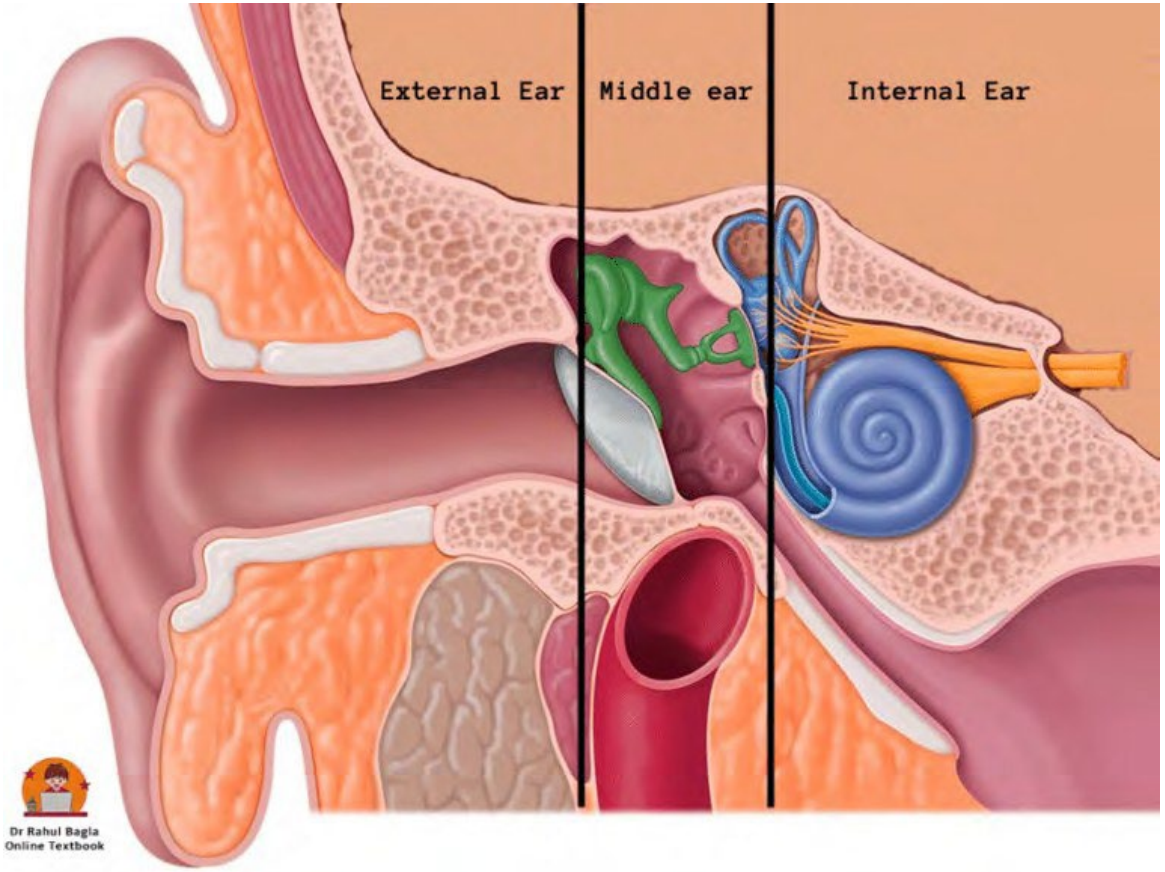
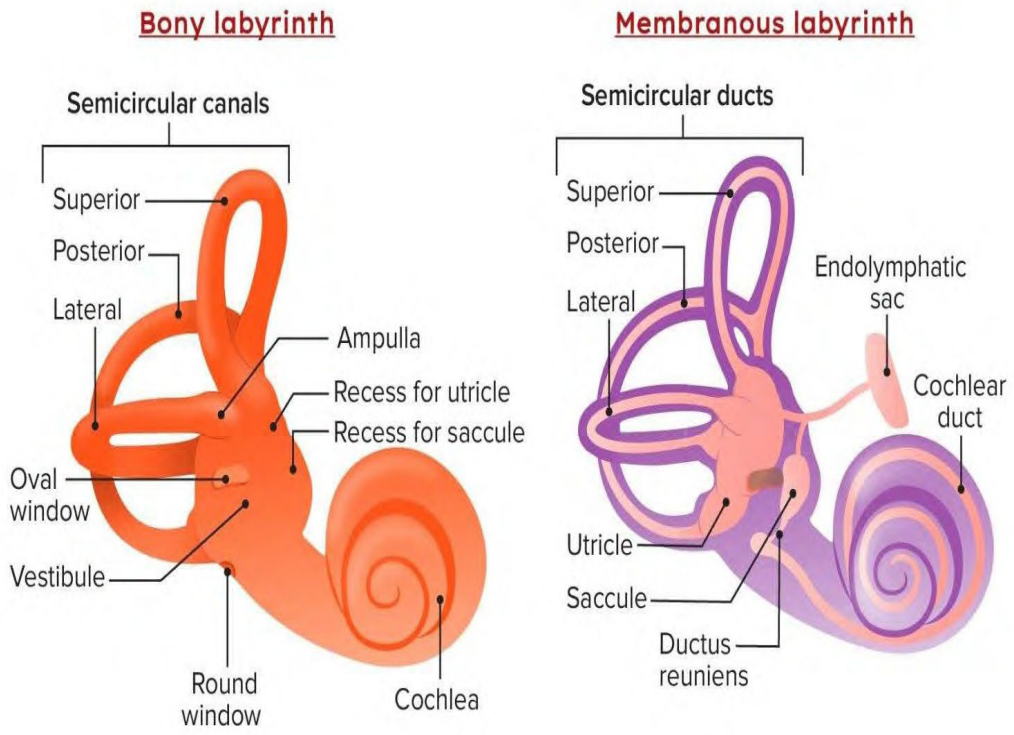
Inner Ear Anatomy





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What is Dizziness?

- Term used to describe a sensation of feeling faint, weak, woozy, wobbly, etc.
- May or may not include a sensation of spinning.
- Can stem from from **cardiac**, **neurological** , or **pharmacologic origins**.

Common Causes of Dizziness

- Stress/anxiety
- Hypoglycemia
- Hypotension
- Hypertension
- Dehydration
- Heat exhaustion
- Vertebrobasilar insufficiency

Persistent Postural Positional Dizziness (PPPD)

- Chronic functional vestibular disorder
- Ongoing feeling of unsteadiness, rocking, or floating with no true spinning sensation.
- Triggered by initial dizzy event
- Persists for months due to the brain's mismatch of visual and vestibular processing.
- Symptoms worse with movement and being upright.

What is Vertigo?

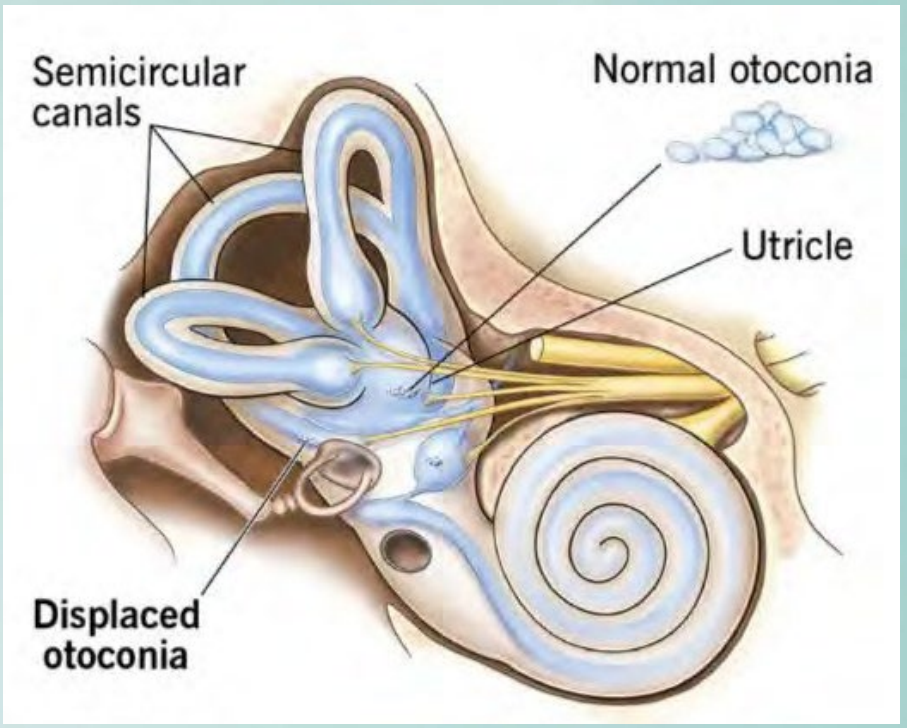
- False perception of spinning.
- Can be associated with tinnitus with/without hearing loss.
- Sign of true inner ear pathology.
- Can be peripheral or central in etiology.

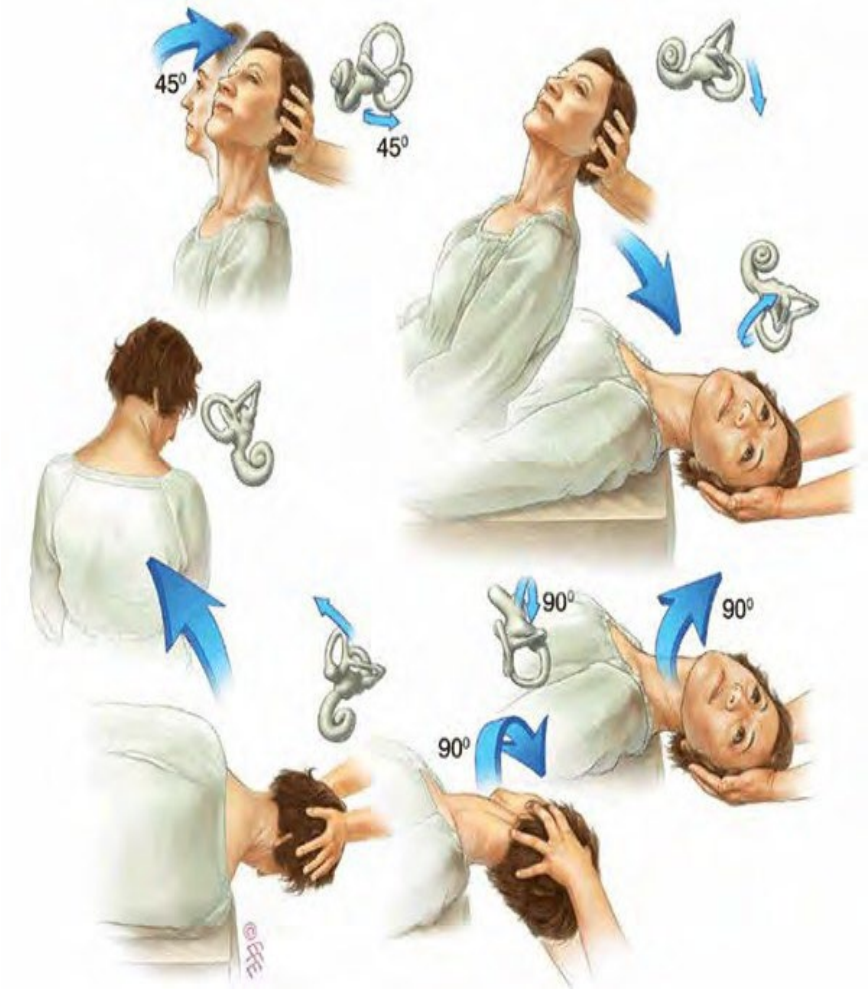
Common Types of Vertigo

- Benign Paroxysmal Positional Vertigo (BPPV)
- Vestibular Neuritis
- Vestibular Labyrinthitis
- Meniere's Disease

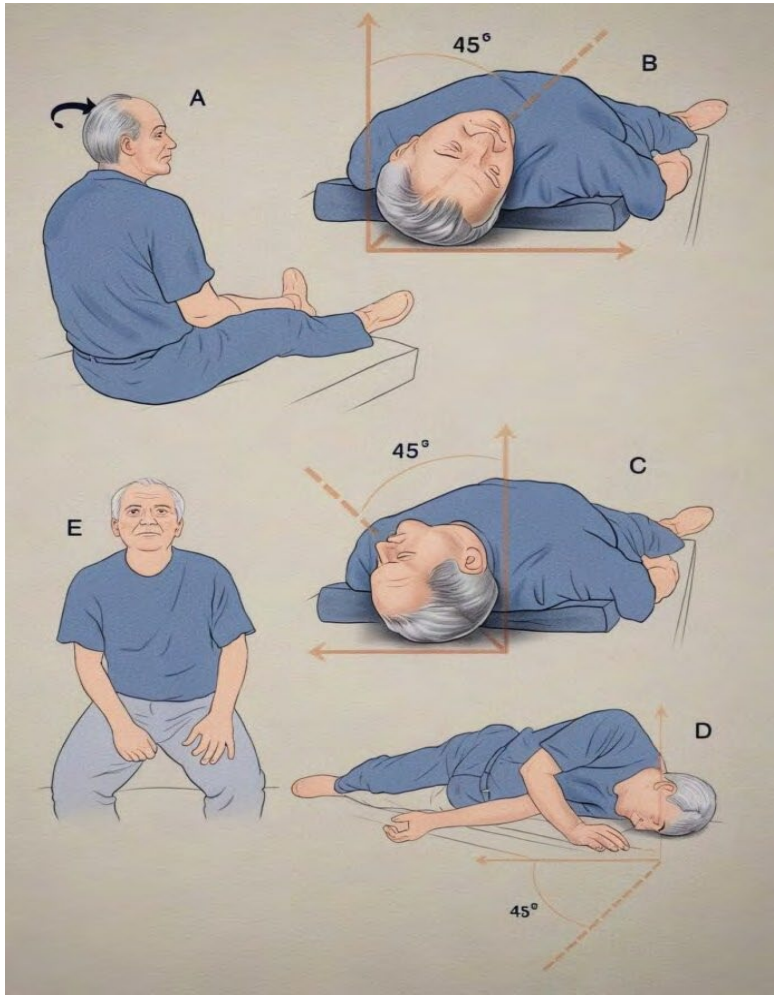
Benign Paroxysmal Positional Vertigo (BPPV)

- Most common vestibular disorder in adults.
- Can emerge from posttraumatic head injuries or postviral.
- Vertigo is trigge red by displaced otoconia from the utricle /saccule into the semicircular canals.





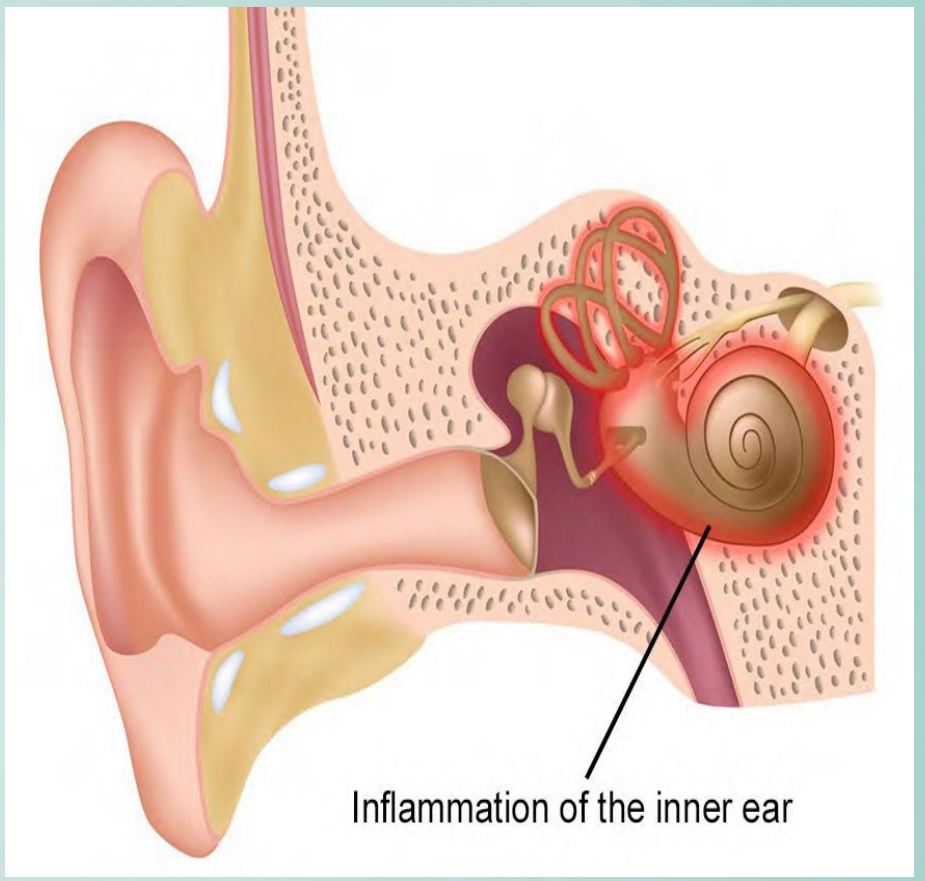
Dix- Hallpike Maneuver



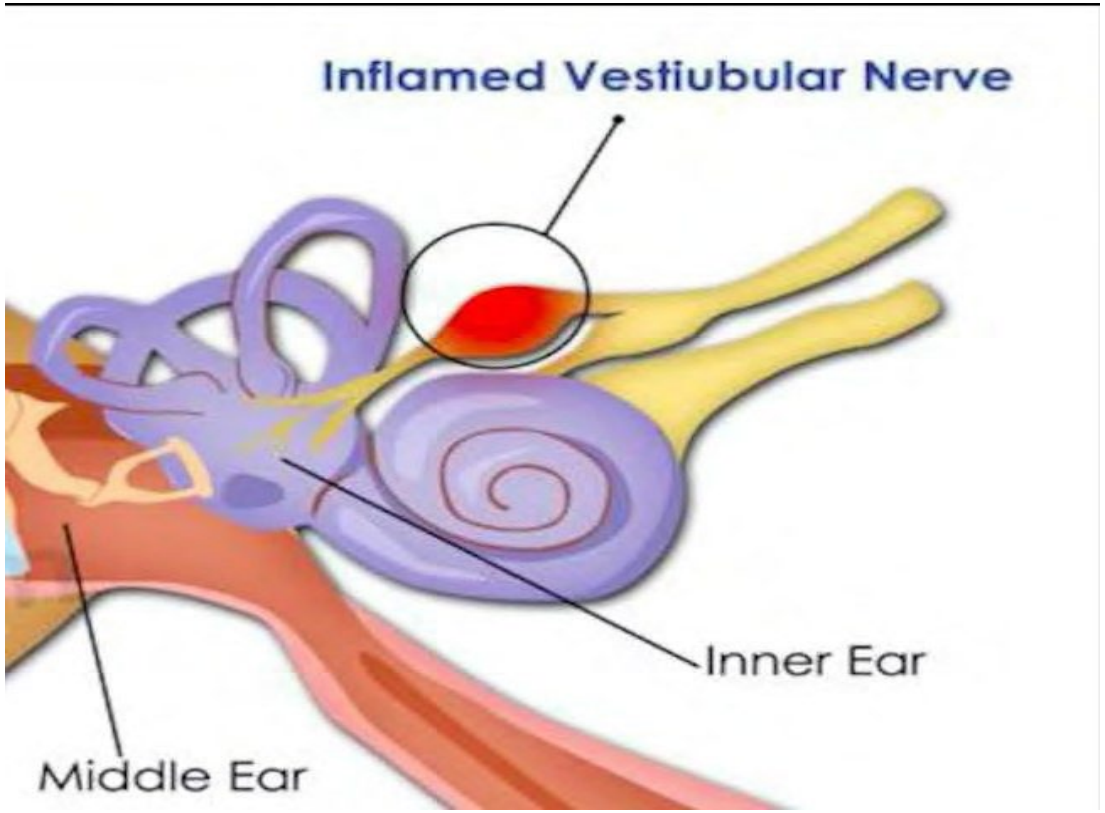
Epley Maneuver

Labyrinthitis

- Inflammatory disorder of the membrane of the labyrinth.
- Can affect both the vestibule and cochlea.
- Symptoms accompanied by sudden onset of vertigo +/- hearing loss.
- Nystagmus noted on exam with hearing loss on audiogram.



Neuronitis



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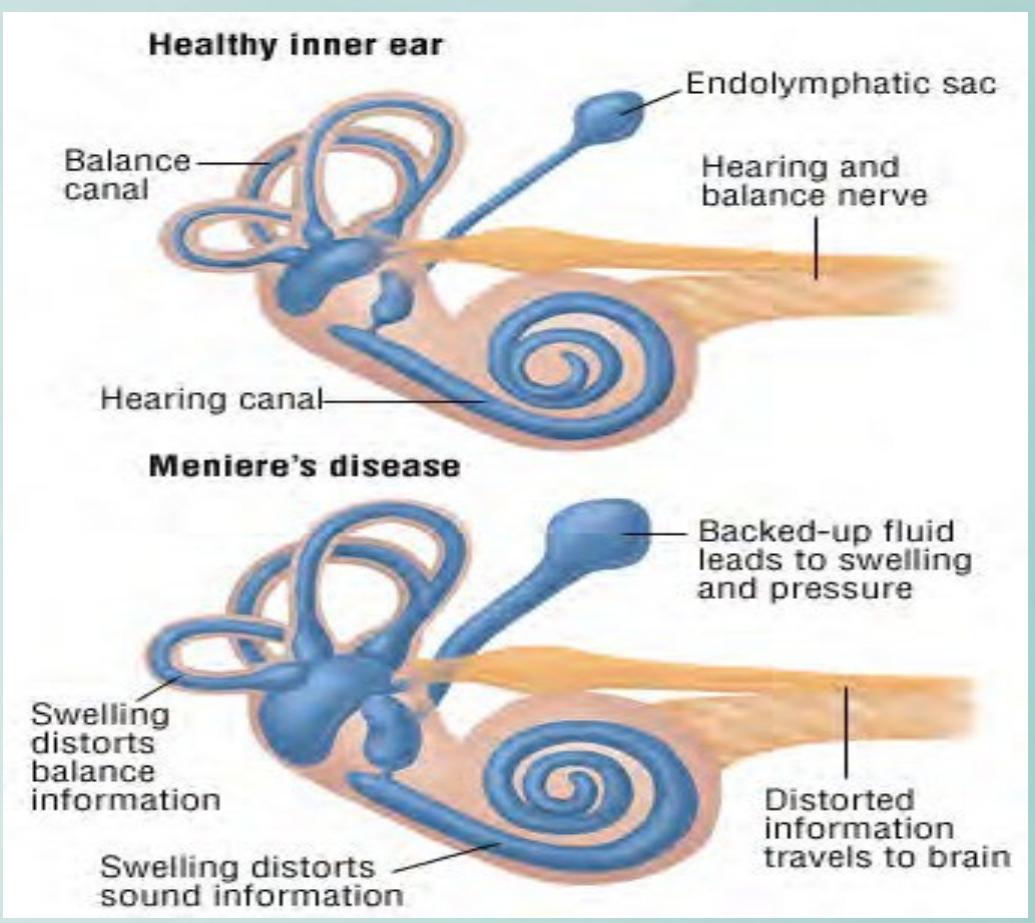
- Inflammation of CNVIII.
- Usually affects just the vestibular portion of nerve.
- Symptoms of sudden vertigo lasting for days.
- No associated hearing loss.
- Occasionally associatedwith balance issues.

Meniere's Disease

- Due to endolymphatic hydrops.
- Given episodic nature of disease, hard to diagnose .
- Presents as fluctuating, unilateral aural fullness, episodic vertigo, unilateral tinnitus, and low frequency hearing loss.



HINTS Exam

- Best used during an acute vertiginous episode
- Helpful in determining if the vertigo is peripheral or central in origin; would need imaging if concern for central etiology is high!

HINTS Exam Interpretation

Test	Peripheral	Central
Head Impulse Test	Abnormal - patient loses focus with quick head movements, indicating VOR isn't intact	Normal - patient eye keeps focus with quick head movements
Nystagmus	None or unidirectional	Bidirectional or vertical
Test of Skew	Normal, no skew	Abnormal correction

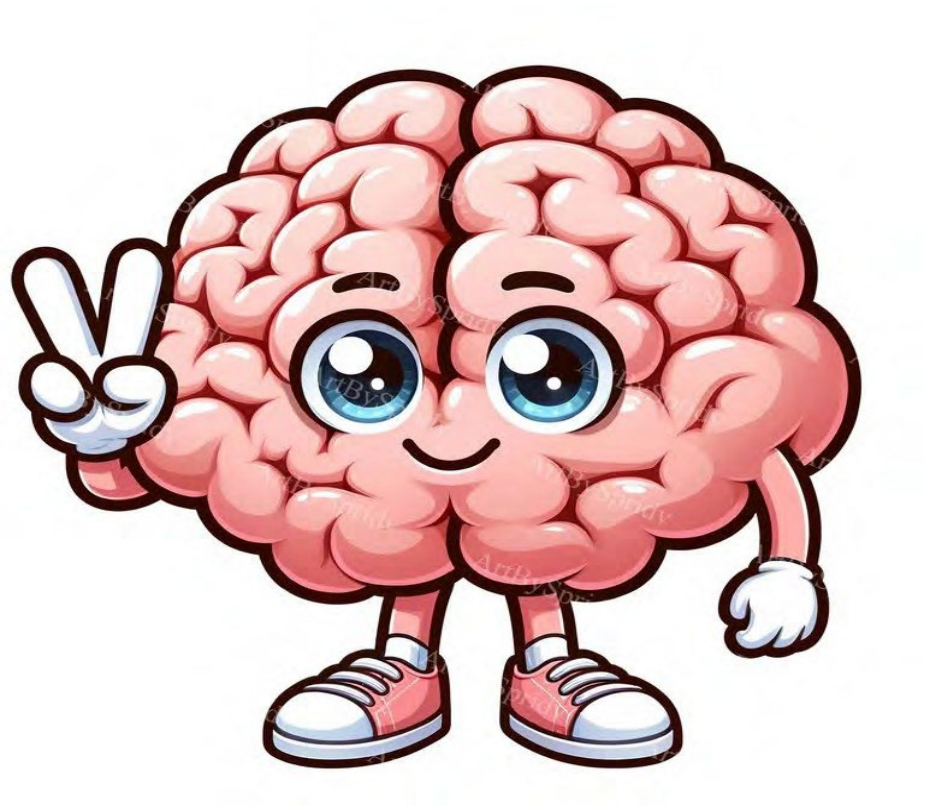
Pharmacology

- Meclizine 12.5 to 25 mg q6 -8h prn
- Promethazine 25 to 30 mg prn
- Scopolamine patch - apply behind ear for 8 hours prn
- Valium 1 to 5 mg q12h for up to 48 -72 hours

Role of Physical Therapists

- When the vestibular system is damaged as a result of injury or disease, the brain can no longer rely on its systems for information regarding equilibrium and motion.
- Vestibular rehabilitation aims to retrain the brain to recognize the process signals from the vestibular system once again.

Key Takeaways



- Dizziness and Vertigo have distinct differences.
- Need to identify peripheral vs central cause.
- Important to know when to refer to ENT.
- Avoid long-term use of vestibular suppressants as it can hinder the brain’s ability to compensate.

Questions?

References

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