

AUDIOLOGY SERVICES
Balance

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BPPV

B Benign

P Paroxysmal

P Positional

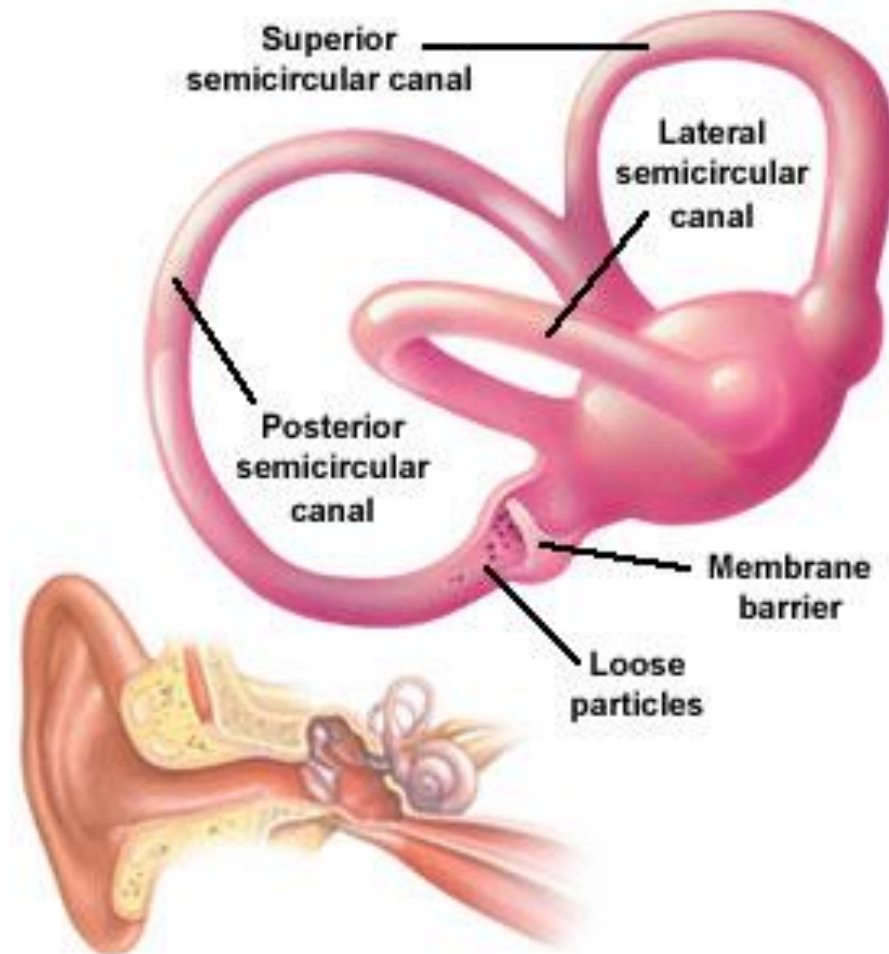
V Vertigo

**BPPV IS A MECHANICAL DISORDER-
DRUGS HAVE NO EFFECT**

Mechanics and Causes of BPPV

Crystals become loose and fall into a semi-circular canal
Wrong message sent to the brain.

Causes Include :
Falls/
Head trauma
and Viral/Bacterial infections



Direct referral to Audiology for BPPV

If the patient's symptoms relate to BPPV and consist of the following the GP can use the Choose and Book referral (BPPV SERVICE-AUDIOLOGY).

- **Positional vertigo eg. when turning over in bed or looking up/down.**
- **Sudden spinning vertigo with short duration (seconds to minutes).**
- **No other Audiological or Vestibular problems.**

If they have any other Audiological or Vestibular Symptoms patients should be referred to ENT.

Diagnosis and Treatment

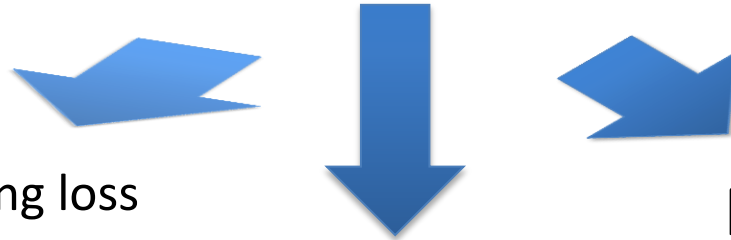
Dix hall pike test <https://www.youtube.com/watch?v=wgW0muB1VFY>

Epley Manoeuvre <https://youtu.be/9SLm76jQg3g>

Menieres

Episodes of **vertigo** can be severe, including **vomiting** and **nausea**.
Lasts few minutes to hours

Usually affects one side



Fluctuating hearing loss

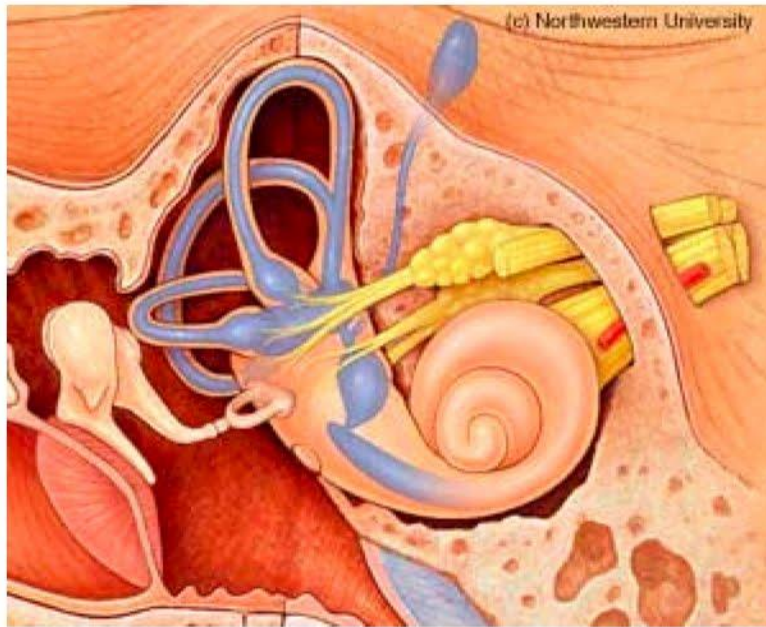
Roaring Tinnitus

Fullness

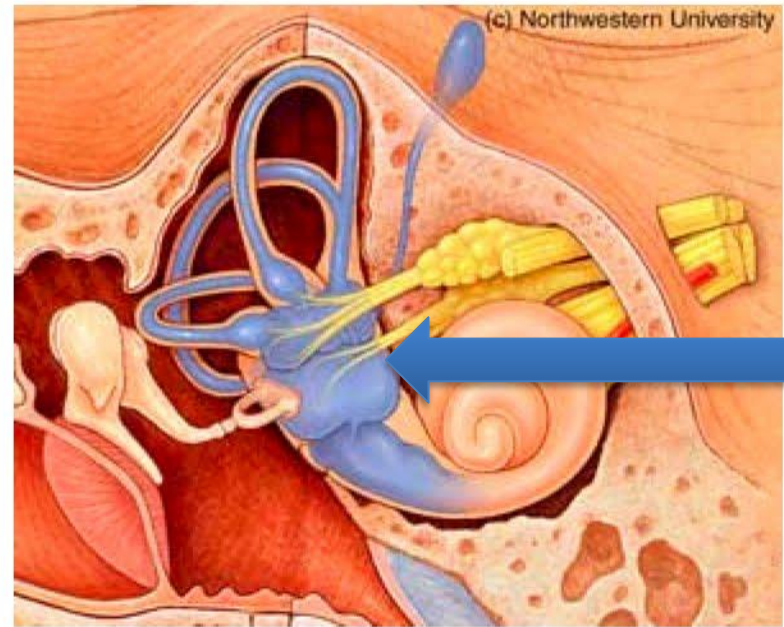
7-10% have a family history

Causes

Fluid increases in the endolymphatic sac.



a normal inner ear



inner ear with Meniere's Disease

Other unknown factors

Labyrinthitis

Affects balance and hearing nerve

Severe sudden Vertigo

Usually only one ear affected

Sudden hearing loss

Tinnitus

Can last for 2 weeks to 2 months

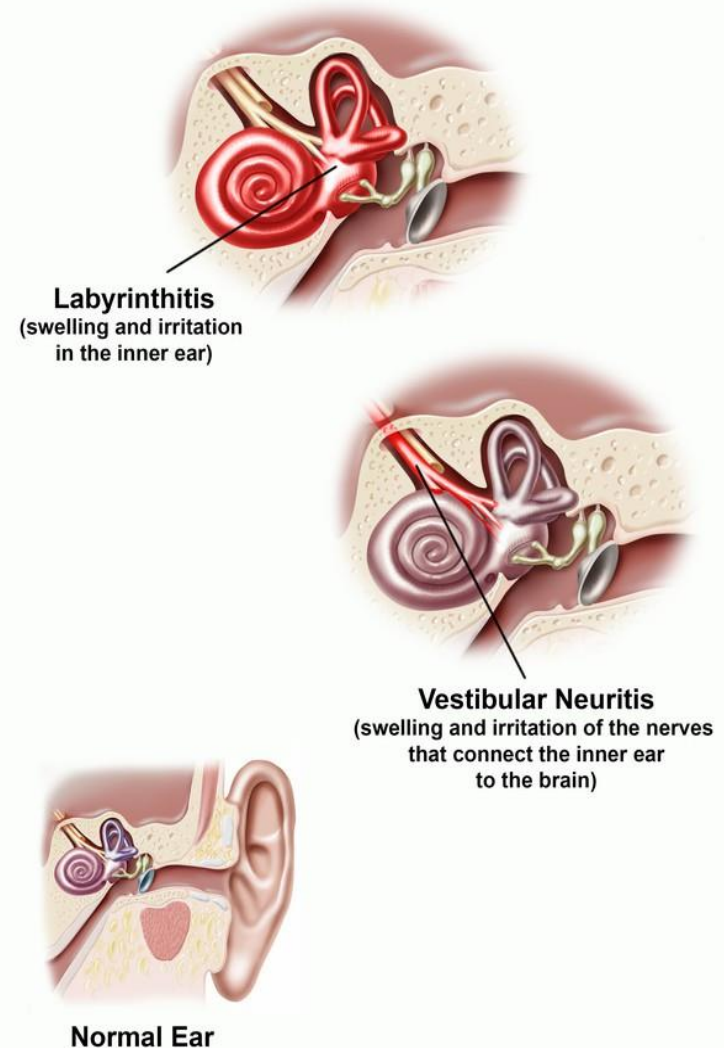
Vestibular Neuronitis

Affects the balance nerve

Severe sudden Vertigo

No Hearing loss or Tinnitus

Labyrinthitis and Vestibular Neuritis



Bacterial or Viral?

Bacterial



Follows a chronic middle ear infection ,bacteria enters the oval/ round window



More likely to have long term h/loss , Tinnitus or imbalance



Antibiotics/ Rehabilitation

Viral

More common



Associated with herpes virus, can go dormant and flare up again



Symptoms are temporary



Vestibular Rehabilitation

Vestibular Exercises

Used for Meniere's, Labyrinthitis & Any Vestibular Weakness

Aim – target weakness, which movements make them dizzy?

Retrains balance system

Individual to patients problems

Exercises do not stop the attacks but in-between attacks will improve balance and mobility

Patient will feel worse – this is good means exercises are working

Cawthorne Cooksey exercises commonly used, Tai Chi, Yoga, Wii and Pilates

Vestibular sedatives do not help vestibular rehabilitation

Case Study

HISTORY FROM GP

71 Year old man,

For assessment and treatment for his tinnitus and buzzing.

He had it for years but has got worse lately.

Now affecting his sleep.

He has bouts of vertigo and complaining of a woozy head.

Refer to ENT for advice

Case Study

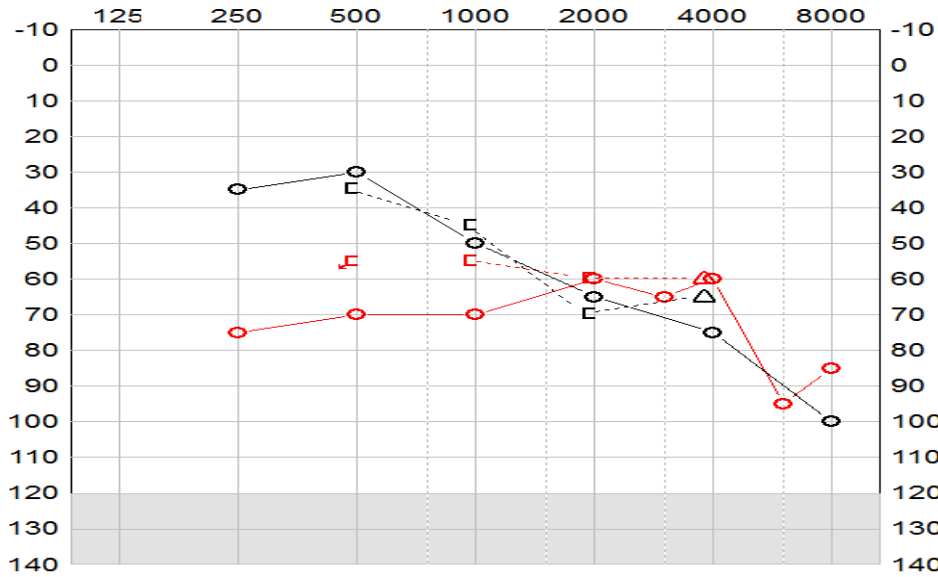
- **ENT** - Dizzy episodes, spinning sensation for hours, last episode lasted 8 hours. Tinnitus louder in Right ear. He can have a few episodes of dizziness per week. Struggles to hear his wife. No earache. Takes Betahistine 8mg tds.
- **Plan** - Increase betahistine to 16mg. To reduce intake salt, coffee, tea, alcohol and chocolate.
- Refer to audiology for VNG and Caloric test.

Audiology –

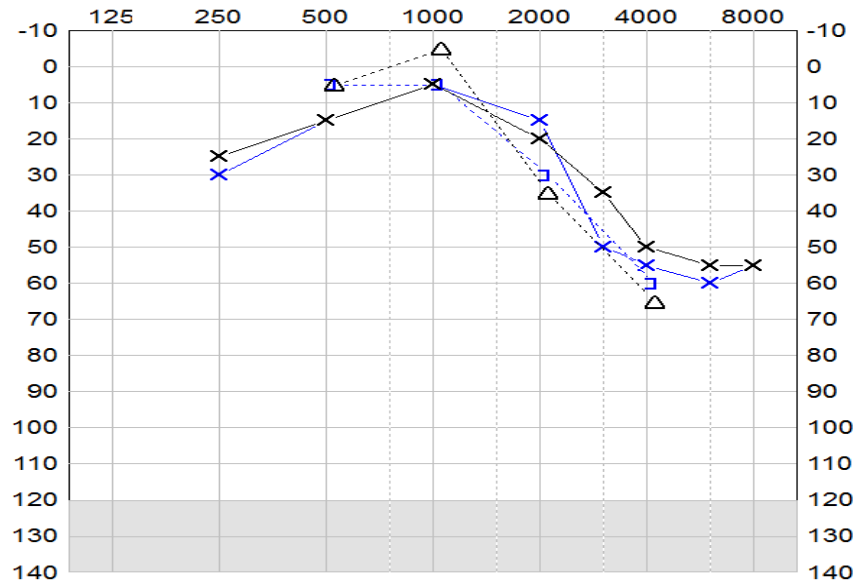
- Started 6 months ago with slight unsteadiness when walking,
 - this then increased to feeling like he was going to fall and a floppy head sensation with the feeling of the room spinning,
 - lasting from 30 minutes up to 8 hours.
 - No triggers for the dizziness but it happens when in bed.
 - Attacks can vary in frequency come on suddenly.
 - Right sided tinnitus, which is louder before an attack and right sided hearing loss.
 - Patient thinks betahistine prescribed has reduced the severity of the attacks.
-
- Pre Caloric Tympanogram – low compliance
 - Caloric Test- DIRECTIONAL Preponderance 19% to the Left
UNILATERAL WEAKNESS 48% IN THE RIGHT

Tests performed

AUDIOGRAM



RED - JULY 2017
BLACK-FEB 2013



BLUE - 2017
BLACK 2013

WHAT IS YOUR

DIAGNOSIS

????????

HISTORY

- The most important thing in assessing the dizzy patient
- Can take a while!
- Clarify symptoms
- Duration/pattern
- Associated symptoms

Management

- Need Audiogram and MRI scan
- Dietary, Salt and Caffeine restriction
- Vestibular sedatives for acute attack
- Bendroflumethiazide
- Betahistine
- Surgery - Intra-tympanic gentamicin
 - Grommet
 - Saccus decompression/vestibular nerve section

