



## ENT causes of vertigo quiz - Answers

Complete the following table regarding the ENT causes of vertigo

Diagnosis	Associated Symptoms	Onset or trigger	Duration of symptoms	Underlying pathophysiology	Investigations	Management
<b>BPPV</b> ( <i>Benign paroxysmal positional vertigo</i> )	Vertigo No extra otological symptoms	Head movement classically "rolling over in bed", looking up or down and bending over and straightening up	Seconds to a minute	Displaced <b>otoconia</b> becomes trapped in the posterior semi-circular canal.  Common post head trauma & elderly	Dix Hallpike	Epley manoeuvre  (alternative - Brandt Daroff exercises)
<b>Ménière's disease</b>	1. Aural pressure 2. Tinnitus 3. Hearing loss 4. Vertigo	Episodic – can be stressed related	Usually hours up to a day	<b>Endolymphatic hydrops</b> – a build-up of endolymph in the endolymphatic sac subsequent rupture and mixing of the differently charged endo and perilymph causing a disequilibrium and stimulation/damage of the neuroepithelium cells of hearing and balance apparatus.	1. (PTA) Pure Tone Audiogram 2. MRI of the posterior cranial fossa and Internal Acoustic Meatus - rule out Acoustic neuroma. 3. FBC, Glucose, TFTs - exclude systemic diseases.	1. Salt restriction 2. Betahistine (prophylaxis) 3. Antiemetic during attacks only 4. Surgery – - Conservative (e.g. grommet) - Destructive (e.g. labyrinthectomy)

<p><b>Vestibular neuritis</b></p> <p><b>(aka acute vestibular failure)</b></p>	<p>Vertigo</p> <p>Vegetative symptoms</p>	<p>Rapid onset</p>	<p>Days or weeks</p>	<p>Viral (? Herpes family) or vascular occlusion – subsequent reduced neural activity in vestibular nerves.</p>	<p>Good clinical examination- early on this will reveal nystagmus in all directions of gaze. Later as compensation occurs, the nystagmus will only be seen when the patient looks in the fast phase. A thorough neurological examination will be normal.</p> <p>Examination of the ear to rule of cholesteatoma / Acute otitis media is mandatory</p>	<p>Treat symptoms in acute phase – hydration, antiemetic for N&amp;V. <u>MUST</u> stop antiemetic after acute phase has passed to allow compensation during mobilisation.</p>
<p><b>Labyrinthitis</b></p> <p><b>(aka acute vestibular failure)</b></p>	<p>Vertigo</p> <p>Tinnitus</p> <p>Hearing loss</p>	<p>Rapid onset</p>	<p>Days or weeks</p>	<p>Viral (? Herpes family) or bacterial (e.g. in cholesteatoma) affecting whole labyrinth, including cochlea – Permanent hearing loss &amp; tinnitus, vertigo will recover.</p>	<p>Good clinical examination- early on this will reveal nystagmus in all directions of gaze. Later as compensation occurs, the nystagmus will only be seen when the patient looks in the fast phase. Examination of the ear to rule of cholesteatoma / Acute otitis media is mandatory. There will be a sensorineural hearing loss on tuning fork testing.</p>	<p>Treat symptoms in acute phase – hydration, antiemetic for N&amp;V. <u>MUST</u> stop antiemetic after acute phase has passed to allow compensation during mobilisation.</p> <p>In the presence of cholesteatoma or middle ear infection, hospitalisation and consideration for emergency surgery to remove disease and prevent meningitis is recommended.</p>