	BPPV	Meniere's disease	Vestibular neuritis	Ramsay hunt syndrome	Perilymph fistula
Patho-physiology	calcium carbonate crystals, otoconia/ canaliths dislodge from the utricle to the semicircular canals (mainly posterior one)	Increase the volume of endolymph in the semicircular canals → distention of the membranous labyrinth	inflammation of the vestibular nerve (viral infection) → disrupts the transmission of sensory information from the ear to the brain	Re-activate varicella zoster virus in the geniculate ganglion	rupture of the round-window membrane or trauma to the stapes footplate.
etiology	Head trauma Surgery Dehydration	Unknown	Viral infection		
Triger	Head motion	Psycho. E.g. stress			straining, lifting or scuba diving
Age	50-70 yrs.	20-60	30-50		
Time of episode	Brief Recurrent episodes: Seconds to 1-2 min. maximum	at least two episodes lasting at least 20 minutes	Severe rotatory vertigo (longer than one day)		
Ass. Symptoms	Maybe N&V But no HL,tinnitus or aural fullness	Low frequency unilateral SNHL Tinnitus Aural fullness N&V , headache increase sensitivity to loud noise	Severe N&V Oscillopsia horizontally rotating nystagmus to the non-affected side abnormal gait w/ tendency to fall to affected side **no hearing loss**	Facial palsy Severe ear pain	Tinnitus Deafness

Dx	dix-hallpike test : positive when provoke vertigo or nystagmus				
Tx	Canalith reposition procedure e.g. Epley's maneuver Or home Tx e.g. brandt-daroff	1- Life style change: (limit salt, caffeine, alcohol) 2- Medical if no control by life style Thiazide diuretic betahistine hydrochloride trans tympanic injection of glucocorticoid & gentamycin 3- Endo-lymphatic sac drainage or Labyrinthectomy	Anti-histamine Anti-emetic Benzo. But not more than 3 days Antibiotics or antivirals if the cause is infection		Bed rest Surgical repair if persisted symptoms