

# BPPV

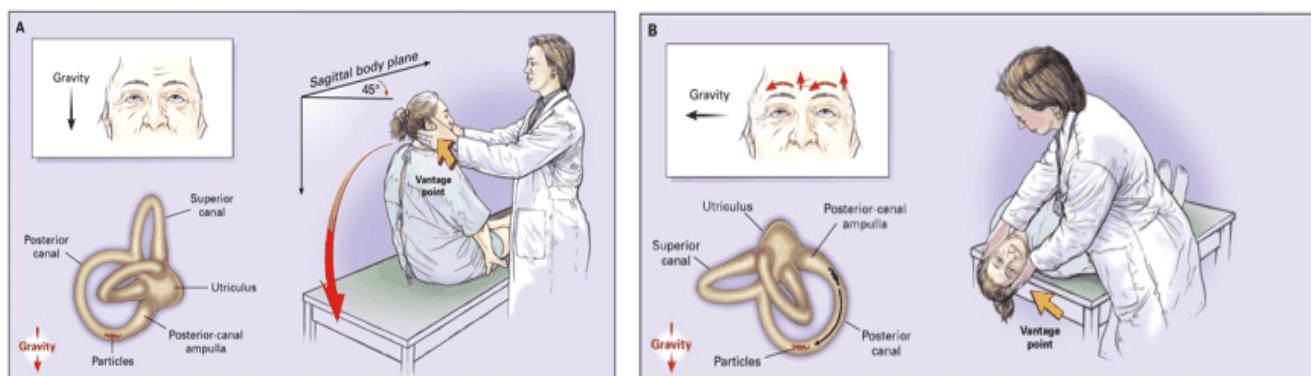
## ASSESSMENT AND TREATMENT

### A PRACTICAL GUIDE TO DIZZINESS AND DISEQUILIBRIUM

#### Evaluation/Treatment of BPPV

- 1) Perform Dix-Hallpike test on any patient reporting vertigo/dizziness with getting in/out of bed, tipping head back or bending over AND on any patient >65 with reports of imbalance or dizziness.
- 2) If Dix-Hallpike is negative, perform Roll Test.
- 3) If positional testing is positive, perform appropriate canalith repositioning maneuver or refer to experienced provider such as a vestibular physical therapist.
  - Do **NOT** prescribe meclizine. If patient is very nauseous and not tolerating testing or treatment maneuvers, consider giving anti-emetic.
  - Do **NOT** order imaging studies.
  - Do **NOT** recommend post-treatment restrictions
- 4) Patient should follow-up within 4 weeks to verify resolution of symptoms.
- 5) If positional testing is negative, but patient is still symptomatic with movements, consider referral to vestibular rehab for habituation training.

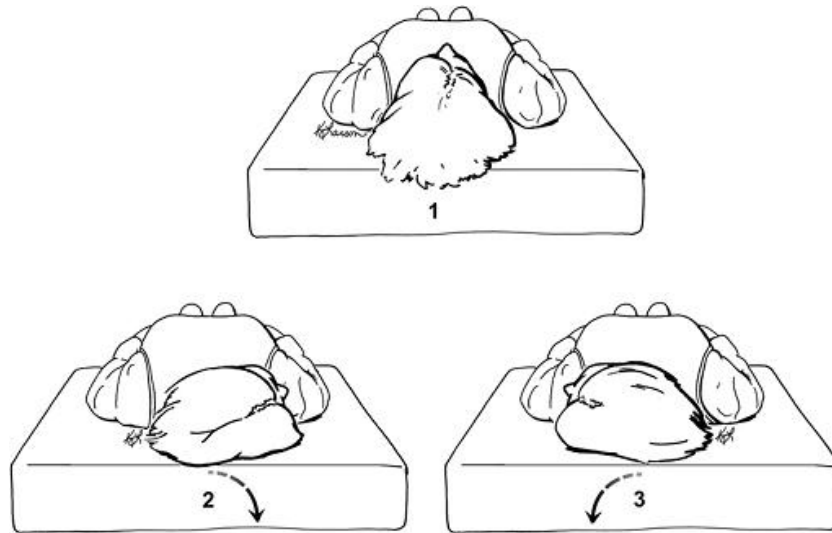
#### Dix-Hallpike (Assesses Posterior and Anterior Canals)



Furman, JM and Cass, SP. Benign Positional Vertigo. New England Journal of Medicine;1999 (341): 1593.

- A positive test is indicated by torsional and upbeat nystagmus.
- If the patient feels dizzy but there is no nystagmus this is NOT a positive test.
- If the patient feels dizzy when returning to upright position only this is suggestive of orthostatic intolerance.

## Roll Test (Assesses Horizontal Canals)



1. Patient lies supine
2. Rotate head rapidly ~ 90 degrees to the side, observe for nystagmus, then return to face up position and allow nystagmus to resolve.
3. Rotate head rapidly ~90 degrees to the other side and observe for nystagmus.
4. A positive test = direction changing horizontal positional nystagmus in bilateral roll.
  - a. Horizontal canal canalithiasis presents as geotropic nystagmus which fatigues in less than 60 seconds. The side the patient lies on that elicits the **most** intense nystagmus is the affected side.
  - b. Horizontal canal cupulolithiasis presents as non-fatiguing apogeotropic nystagmus. The side the patient lies on that elicits the **least** intense nystagmus is the affected side.

## Prolonged positioning Maneuver

### *Treatment of Horizontal Canal BPPV*

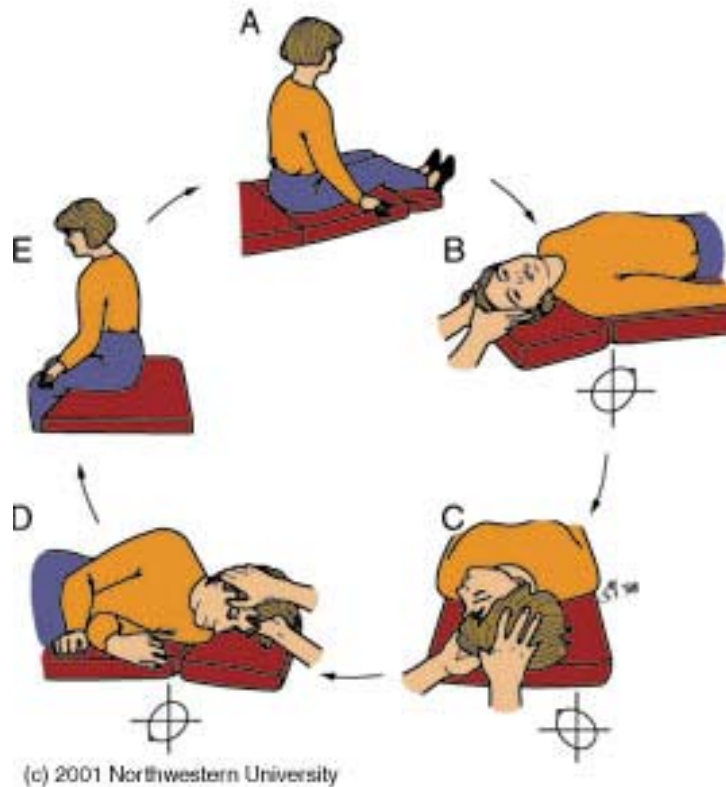
Patient performs at night when going to bed:

Canalithiasis (geotropic nystagmus): patient lies down on back for 1 minute, then rolls to the unaffected side and sleeps on that side all night.

Cupulolithiasis (apogeotropic nystagmus): patient lies down on back for 1 minute, then rolls to the affected side and sleeps on that side all night

## Epley Maneuver/Canalith Repositioning Maneuver *Treatment of Posterior Canal BPPV*

Hold each position for 45 seconds:



Hain, TC. <http://www.dizziness-and-hearing.com>. 25 Feb 2015 <<http://dizziness-and-balance.com/images/epley-cd.jpg>>.

### Considerations for Treatment of BPPV

- 1) Perform 3 cycles of the appropriate canalith repositioning maneuver each session if tolerated.
- 2) Expect resolution within 1-5 visits.
- 3) Always retest each session with frenzel goggles if available.
- 4) If you do not have frenzel goggles and patient is not improving after 3-5 visits, consider referral to provider who has frenzel goggles.
- 5) If you have frenzel goggles and patient is not improving after 5 visits, consider referral to ENT or neurology to rule out other conditions.
- 6) Instruct on home maneuvers only if patient has adequate cervical ROM and able to independently and correctly demonstrate performance of maneuver.

## How to Refer to Vestibular Therapy

If you are a provider **within** the Froedtert Health System: Enter "Vestibular Rehab CFAC clinic referral" in Order Entry in Epic.

Other Froedtert Health Rehab clinics that offer Vestibular Rehab:

- Community Memorial Hospital
- Froedtert Hospital-SCIC and Neuro Rehab
- Moorland Reserve Health Center
- Orthopedic Sports and Spine Center
- Springdale Health Center
- Froedtert South-Kenosha
- Mequon Health Center
- North Hills Center
- West Bend Rehabilitation and Sports Medicine Center

If you are a provider **outside** of the Froedtert Health System: Fax referral to 414-805-7936. Make sure to indicate referral to physical therapy/vestibular rehab and the diagnosis (exp: BPPV, dizziness, vertigo).

If you would like to find a vestibular rehab provider in another area of the state or country here are some additional resources:

- <https://www.vestibular.org/finding-help-support/provider-directory>
- [http://www.neuropt.org/map\\_Vestibular/map.html](http://www.neuropt.org/map_Vestibular/map.html)
- [http://www.neuropt.org/docs/vsig-physician-fact-sheets/how-to-find-a-pt-skilled-in-treating-vestibular-disorders.pdf?sfvrsn=372f3de3\\_2](http://www.neuropt.org/docs/vsig-physician-fact-sheets/how-to-find-a-pt-skilled-in-treating-vestibular-disorders.pdf?sfvrsn=372f3de3_2)

# Algorithm for Treatment of BPPV

