

Beyond Posterior Canal BPPV

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Fact Sheet

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Benign paroxysmal positional vertigo (BPPV) is the most common cause of vertigo.¹ It is characterized by brief episodes of vertigo triggered by changes in head position. It can cause significant impairments in a patient's quality of life and interrupt participation in work and daily activities.² BPPV can also contribute to an increased risk for falls in older patients,³ which increases the likelihood of secondary complications such as fractures and head trauma.

Canalithiasis Versus Cupulolithiasis

There are two forms of BPPV, canalithiasis and cupulolithiasis. Canalithiasis is the most common and occurs when otoconia are moving within the semicircular canal, causing vertigo and nystagmus that resolves within 60 seconds. Cupulolithiasis occurs when otoconia adhere to the cupula and cause vertigo and nystagmus that persist for a longer period of time.⁴

Anterior and Lateral Canal BPPV

BPPV most commonly affects the posterior canal. However, it may affect any of the semicircular canals and has also been observed to affect multiple canals simultaneously.⁵ Multiple canal BPPV is more commonly seen following head trauma.⁵ Anterior canal (AC) BPPV is uncommon, occurring less than 5% of the time, and elicits down-beating torsional nystagmus.⁴ Involvement of the AC is assessed by the Dix-Hallpike test and is treated with the canalith repositioning procedure or the Semont maneuver.⁶ If the patient's history is consistent with BPPV, but nystagmus is not observed with the Dix-Hallpike test, then the roll test should be performed to evaluate for lateral canal (LC) BPPV.⁷ LC-BPPV accounts for up to 10-15% of cases of BPPV.⁷ The roll maneuver is commonly used to treat LC-BPPV.⁷ When the patient reports positional vertigo that is not accompanied by nystagmus or the nystagmus does not fit the expected patterns, a cause other than BPPV should be considered and the physician will be contacted.

Successful treatment of BPPV depends on an accurate diagnosis based on specific patterns of nystagmus. A referral to a physical therapist with experience treating BPPV can lead to quick resolution of symptoms, significantly reduce secondary complications such as anxiety, falls, and decreased quality of life and reduce waiting time and costs incurred with a specialty physician referral.²

References:

1. Von Brevern M, Radtke A, Lezius F, et al. Epidemiology of benign paroxysmal positional vertigo: a population based study. *J Neurol Neurosurg Psychiatry.* 2007;78:710-715.

2. Fife D, Fitzgerald JE. Do patients with benign paroxysmal positional vertigo receive prompt treatment? Analysis of waiting times and human and financial costs associated with current practice. *Int J Audiol.* 2005;44: 50-57.
3. Oghalai JS, Manolidis S, Barth JL, et al. Unrecognized benign paroxysmal positional vertigo in elderly patients. *Otolaryngol Head Neck Surg.* 2000;122:630-4.
4. Aw ST, Todd MJ, Aw GE, McGarvie LA, Halmagyi GM. Benign positional nystagmus: A study of its three-dimensional spatio-temporal characteristics. *Neurology.* 2005;64:1897-1905.
5. Tomaz A, Gananca MM, Gananca CF, et al. Benign Paroxysmal Positional Vertigo: Concomitant Involvement of Different Semicircular Canals. *Ann Oto Rhinol Laryn.* 2009;118: 113-117.
6. Herdman SJ. Advances in the treatment of vestibular disorders. *Phys Ther.* 1997;77:602-618.
7. Battacharyya N, et al. Clinical practice guideline: benign positional vertigo. *Otolaryn Head Neck Surg.* 2008;139:S47-S81. R

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