Benign paroxysmal positional vertigo



Ji-Soo Kim, MD, PhD

Department of Neurology, Seoul National University Bundang Hospital

Benign paroxysmal positional vertigo (BPPV) is characterized by brief recurrent episodes of vertigo triggered by changes in head position. BPPV is the most common etiology of recurrent vertigo and is caused by abnormal stimulation of the cupula by free-floating otoliths (canalolithiasis) or otoliths that have adhered to the cupula (cupulolithiasis) within any of the three semicircular canals. Typical symptoms and signs of BPPV are evoked when the head is positioned so that the plane of the affected semicircular canal is spatially vertical and thus aligned with gravity. Paroxysm of vertigo and nystagmus develops after a brief latency during the Dix-Hallpike maneuver in posterior-canal BPPV, and during the supine roll test in horizontal-canal BPPV. Positioning the head in the opposite direction usually reverses the direction of the nystagmus. The duration, frequency, and symptom intensity of BPPV vary depending on the involved canals and the location of otolithic debris. Spontaneous recovery may be expected even with conservative treatments. However, canalith-repositioning maneuvers usually provide an immediate resolution of symptoms by clearing the canaliths from the semicircular canal into the vestibule.