

Benign Paroxysmal Positional Vertigo (BPPV)

Benign Paroxysmal Positional Vertigo (BPPV) is one of the most common causes of dizziness. It is caused by a problem with the part of the inner ear that deals with your sense of equilibrium and balance called the *membranous labyrinth* of the vestibular system. This is a fluid filled sensory organ which is divided into two parts, each of which has a different function. One part consists of three loops called the *semicircular canals*. Each of these canals contain a gelatinous structure called a *cupula* at one end. A cupula will shift in response to rotation of the head such as nodding or turning from side to side. The other part of the *membranous labyrinth* contains two structures called *otolith organs* which consist of a gelatinous like substance filled with crystals called *otoliths*. Because of the weight of the otoliths, these organs respond to gravity and linear movements such as bouncing up and down, breaking suddenly in a car, or tilting. BPPV occurs when these *otoliths* get dislodged from the *otolith organs* and move into the *semicircular canals*. Usually they will freely float in the canals so that when you go to lie down, bend, or roll over you feel like you are spinning. This sensation occurs because the otoliths create a drag affect in the fluid of the canal which moves the *cupula* (canalithiasis). When this happens, the brain thinks you are turning, until the *otoliths* settle down at the lowest point in the canal (like snow in a snow globe). Sometimes the *otoliths* can get stuck on the *cupula* making it sensitive to gravity and you may feel persistent spinning while you are in the position that provokes your symptoms (cupulolithiasis).

BPPV is not life threatening, but can make you feel terrible with a spinning sensation (called vertigo), nausea, and sometimes make you feel less steady on your feet. Fortunately it is fairly easy to treat with vestibular rehabilitation. It usually takes between one to four treatments of specific positional maneuvers to treat successfully. If you have BPPV and come for vestibular rehabilitation you will get a complete examination to confirm your diagnosis. We will then determine which type of BPPV you have and give you the specific treatment to cure your BPPV.

-James R. Barsky, PT

