



Physical Therapy and Benign Paroxysmal Positional Vertigo (BPPV)

What is BPPV?

Benign paroxysmal positional vertigo (BPPV) is an inner ear problem that causes short periods of dizziness when your head is moved in certain positions. It occurs most commonly when lying down, turning over in bed, and looking up. This dizzy sensation called *vertigo* usually only lasts a few seconds up to a minute, but often makes you feel like the room is spinning around you. It may also make you feel lightheaded, off balance, and nauseous.

What causes BPPV?

BPPV is thought to occur because of debris, which some call "ear rocks" or "crystals" that move from one part of the inner ear to another. These "ear rocks" are called *otoconia* and are tiny calcium carbonate crystals that are supposed to be attached to a part of the inner ear called the *utricle*. In BPPV, the crystals become loose and go into another part of the inner ear, the *semi-circular canals* (usually the posterior canal). When you move your head a certain way, the crystals move inside the canal, stimulate the nerve endings, and you become dizzy.

The crystals may become loose due to trauma to the head, infection, or age, but in some cases there is no obvious cause.

How a Physical Therapist Can Help

A physical therapist will help determine if the cause of your dizziness is BPPV. Most people recover from BPPV with a simple, but very specific head and neck maneuver performed by their physical therapist. The maneuver is designed to move the crystals from the semicircular canal back into the appropriate area in the inner ear (the utricle). The most common treatment designed to fix the problem is called the Epley maneuver, which involves moving the head through a series of 4 positions, staying in each position for about 30-60 seconds. Another treatment is called the Semont maneuver, which involves rapidly moving the body from lying on one side to lying on the other.

BPPV can return if new crystals break off and get into the semicircular canal. A physical therapist can apply the appropriate maneuver to return the crystals to their correct position in the inner ear and may also provide exercises if needed. In a very few cases that cannot be managed with non-surgical interventions such as the maneuvers mentioned above, a surgical procedure called a "posterior canal plugging" may be considered, but is usually a last resort and *rarely* ever done.

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