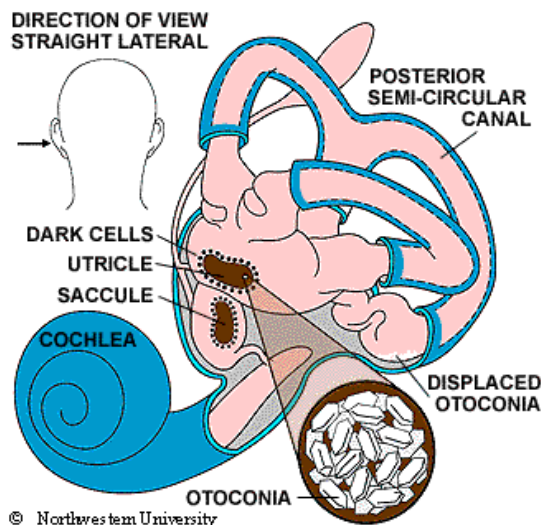




BENIGN PAROXYSMAL POSITIONAL VERTIGO



Benign Paroxysmal Positional Vertigo (BPPV) causes dizziness due to debris which has collected within a part of the inner ear balance system. You can think of this debris as "ear rocks." Chemically, ear rocks are small crystals of calcium

carbonate. They are derived from structures in the ear called "otoliths" that have been damaged by head injury, infection, or other disorder of the inner ear, or degenerated because of advanced age.

The symptoms of BPPV include dizziness or vertigo, lightheadedness, imbalance, and nausea. Activities which bring on symptoms will vary in each person, but symptoms are almost always precipitated by a position change of the head with respect to gravity. Getting out of bed or rolling over in bed are common "problem" motions. Because people with BPPV often feel dizzy and unsteady when they tip their heads back to look up, sometimes BPPV is called "top shelf vertigo". Women with BPPV may find that the use of hair dryers in beauty parlors brings on symptoms. An intermittent pattern is the usual situation. BPPV may be present for a few weeks, then stop, then come back again.

WHAT CAUSES BPPV?

The most common cause of BPPV in people under age 50 is head injury. In older people, the most common cause is degeneration of the vestibular, or balance, system of the inner ear. However, in perhaps half of all cases, BPPV is called "idiopathic," which means it occurs for no known reason.



HOW IS THE DIAGNOSIS OF BPPV MADE?

Your physician can make the diagnosis based on your history, findings on physical examination, and the results of balance and hearing tests. An ENG may be needed to look for the characteristic nystagmus (jumping of the eyes). An MRI scan may be performed if there is any possibility of a stroke or brain tumor. It is possible to have BPPV in both ears (bilateral), which may make diagnosis and treatment more challenging.

HOW MIGHT BPPV AFFECT MY LIFE?

Certain modifications in your daily activities may be necessary to cope with your dizziness. Use two or more pillows at night. Avoid sleeping on the "bad" side. In the morning, get up slowly and sit on the edge of the bed for a minute. Avoid bending down to pick up things, and extending the head such as to get something out of a cabinet. Be careful when at the dentist's office, beauty parlor, or in sports activities or positions where the head is flat or extended.

HOW IS BPPV TREATED?

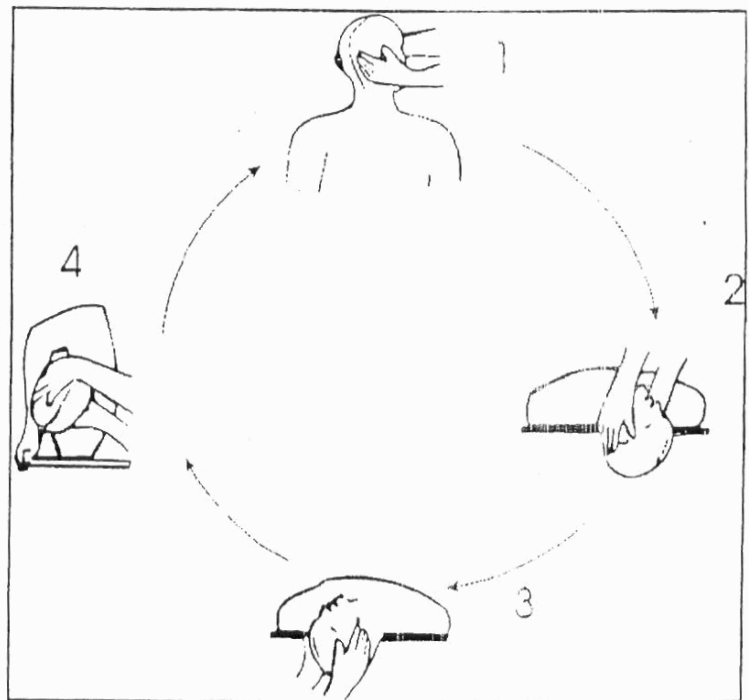
BPPV has often been described as "self-limiting" because symptoms often subside or disappear within six months of onset. Symptoms tend to wax and wane. Motion sickness medications are sometimes helpful in controlling the nausea associated with BPPV but are otherwise rarely effective. Anti-dizziness medication may actually prolong the symptoms of BPPV. However, various kinds of physical maneuvers and exercises have proved effective.

OFFICE TREATMENT OF BPPV

The initial treatment is usually performed in the doctor's office. It is very effective, with roughly an 80% cure rate, according to a study by Herdman and others (1993.)

The Epley maneuver is named after it's inventor. It is intended to move debris or "ear rocks" out of the sensitive back part of the inner ear to a less sensitive location. It takes about 20 minutes to accomplish and involves sequential movement of the head into five positions with the help of a clinician. The recurrence rate for BPPV after these maneuvers is about 5 percent, and in some instances a second treatment may be necessary.

After completion of the maneuver, you should be prepared to follow. The instructions below, which are aimed at reducing the chance, that debris may fall back into the sensitive back of the ear.



Epley Maneuver



INSTRUCTIONS FOR PATIENTS AFTER TREATMENT

1. Wait for 10 minutes after the maneuver is performed before going home. This is to avoid "quick spins", or brief spurts of vertigo as debris re-positions itself immediately after the maneuver. Don't drive home yourself; have someone else drive you.
2. Sleep semi-recumbent for the next two days. This means sleep with your head halfway between being flat and upright (a 45-degree angle). This is most easily done by using a recliner chair or by using pillows arranged on a couch. During the day, try to keep your head vertical. You must not go to the hairdresser or dentist. NO exercise which requires head movement. When men shave under their chins, they should bend their bodies forward in order to keep their head vertical. If eye drops are required, try to put them in without tilting your head back. Shampoo only under the shower.
3. For at least a week, avoid provoking head positions that might bring this on again.
 - Use two pillows when you sleep.
 - Avoid sleeping on the "bad" side.
 - Don't turn your head far up or far down.
 - Avoid far head-forward positions such as might occur in certain exercises. (i.e. touching your toes).
3. At one week after treatment, put yourself in the position that usually makes you dizzy. Position yourself cautiously and under conditions in which you can't fall or hurt yourself. Let your doctor know how you did.