Wayne T. Shaia, M.D.

Fred T. Shaia, M.D.

Otology & Neuro-Otology Diseases of Hearing & Balance





Benign paroxysmal positional vertigo (BPPV) is a common and often frightening disorder that affects patients of a wide age range. It is usually described as a brief, violent vertiginous episode occurring within seconds after a change in head position. Usually, the attack resolves if the patient remains in the position without moving only to reoccur each time the patient returns to that position.

About 8% of people who suffer from 'spells' or 'attacks' of dizziness have BPPV. It is most frequently seen in adults over the age of 50 years. The problem occurs when particles form and become dislodged from the inner ear. These particles then float into the balance canals. Here the particles block or alter the normal flow of the ear fluids. Following positional changes or head turns, the tiny sensory cells of the balance system are abnormally stimulated, and dizziness occurs.

The following conditions may be causes of BPPV; head trauma, viral labyrinthitis, postsurgical (ear and general), prolonged bed rest, and most often, the natural aging process.

SYMPTOMS

Symptoms may vary somewhat, but usually include whirling vertigo and nystagmus (quick jerky eye movements) induced by a specific head position or movement. Nausea may or may not be present. These episodes occur within seconds after the aggravating position is achieved and usually last only a few seconds. Spontaneous recovery usually occurs within 3 weeks to 3 months. Repeated episodes are possible.

DIAGNOSIS

Our staff will obtain a history of dizzy spells to include severity, duration and aggravating position or positions. You will also be asked questions regarding your general health, such as high blood pressure, neck and back problems, head trauma, and neurological disorders. There are many causes of dizziness and other disease processes must be ruled out.

A positioning test will typically show a specific pattern of symptoms. Usually with BPPV, eye rotation will develop and can be seen by an observer when the problem ear is put into provoking position. During this procedure a severe tumbling sensation may develop. This usually does not recur if the position is repeated within 3 minutes.

Several tests may be required to make a differential diagnosis.

- 1. Audiometric evaluation (hearing test) to assess the hearing mechanisms of the inner ear.
- 2. Electronystagmography (ENG) to evaluate the balance mechanisms of the inner ear.

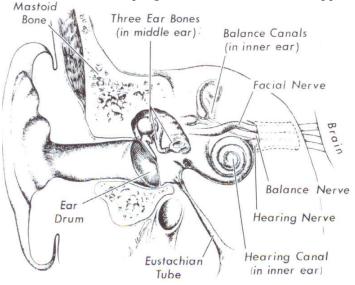
- 3. CT Scan or MRI may be needed to rule out the slight possibility of a small benign tumor.
- 4. Auditory Brainstem Response (ABR) to assess the integrity and function of the auditory nerve.
- 5. Electrocochleography (ECOG) to measure the fluid of the inner ear.

TREATMENT

In most cases, the most effective treatment (Repositioning Procedure) is an Epley maneuver. This is a series of head positioning maneuvers. The head maneuvers must follow a specific order and timing sequence. The floating deposits must be directed around the curves of the balance canal and back into the inner ear. In intractable cases, surgery is recommended to obstruct the posterior balance canal.

FOLLOW-UP

- 1. Avoid head-back or head-forward positions for 48 hours after a treatment session. Also, avoid any other positions that cause the dizziness to occur.
- 2. Sleep on at least 3 pillows or in a recliner for the first 48 hours of a treatment session.
- 3. Lift your feet up to tie your shoes or have someone else tie them.
- 4. Refrain from sleeping on the affected side for one week.
- **5.** The procedure is repeated as necessary at weekly intervals until vertigo symptoms have cleared or no further progress toward resolution is apparent.





BALANCE AND EAR CENTER INC, 10200 Three Chopt RdHenrico, VA 23233 804-288-EARS(3277) www.shaiamd.com