



TREATING BENIGN PAROXYSMAL POSITIONAL VERTIGO

This fact sheet is intended to help you understand which treatments are most effective for benign paroxysmal positional vertigo (BPPV).

Neurologists from the American Academy of Neurology are doctors who identify and treat diseases of the brain and nervous system. The following evidence-based information* is provided by experts who carefully reviewed all available scientific studies on treating BPPV.

What is benign paroxysmal positional vertigo?

BPPV is a common cause of dizziness. The dizziness experienced is typically a feeling of spinning or whirling after you move your head in certain ways. It can happen when turning in bed, looking up or bending. The spinning (vertigo) usually lasts less than 30 seconds and may be severe.

BPPV is an inner ear problem. It usually affects the part of the inner ear called the posterior semicircular canal, which is a sensing tube. It is believed to be caused by loose calcium carbonate crystals. These crystals move in the sensing tubes of the inner ear. When the head is moved in certain ways, the crystals move and trigger the inner ear sensors to fire. This leads to a brief but often strong sensation of spinning.

A doctor or therapist can perform a series of treatment maneuvers. These are a series of head and body movements. The maneuvers move the calcium crystals out of the sensing tube (where they do not belong). The crystals move into another inner chamber. There they can be absorbed. These maneuvers are now well-established as effective for the most common type of BPPV. This summary looks at which maneuvers are most effective.

How should posterior BPPV be treated?

One maneuver is called canalith repositioning procedure (CRP), or the Epley maneuver. There is strong evidence that CRP is safe and effective for people of all ages. There is some evidence that the Semont maneuver is also an effective treatment.

What about treatment of horizontal or anterior canal BPPV?

The crystals can also be in the horizontal or anterior canal of the inner ear. There is not yet enough evidence to recommend a specific maneuver for horizontal or anterior canal BPPV.

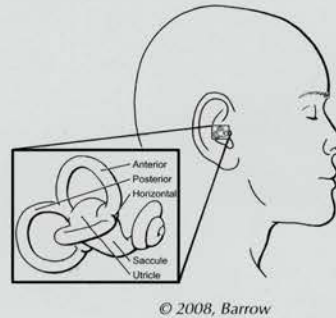


Figure 1. The inner ear balance (vestibular) structures showing the anterior, posterior and horizontal canals. Each canal may be affected by BPPV, but usually it affects the posterior canal.

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Can I perform these maneuvers by myself and feel better?

There is not enough evidence to determine whether people who treat themselves with the maneuvers at home respond as well as when it is done by a doctor or therapist. However, there appears to be little harm in trying this kind of self-treatment. Patients should expect that the initial steps will trigger their vertigo.

Is there a website or video available where I can see demonstrations of these maneuvers?

Yes. Videos of these maneuvers are available at www.aan.com/guidelines for free.

THERAPIES FOR BENIGN PAROXYSMAL POSITIONAL VERTIGO

This is a summary of the American Academy of Neurology (AAN) guideline (*Neurology*[®] 2008;70:2067-2074) regarding recommended use and best practices for treatment of patients with benign paroxysmal positional vertigo (BPPV).

Please refer to the full guideline for detailed findings, supporting evidence, and video clips with demonstrations of the various maneuvers for BPPV at www.aan.com.

Canalith repositioning procedure (CRP) (Figure 2)	
Strong evidence	Strong evidence supports that CRP is established as an effective and safe therapy that should be offered to patients of all ages with posterior semicircular canal BPPV (Level A⁺).
Semont maneuver for BPPV (Figure 3)	
Weak evidence	Weak evidence indicates that the Semont maneuver is possibly effective for BPPV (Level C).
Insufficient evidence	Insufficient evidence exists to compare the relative effectiveness of the Semont maneuver versus CRP (Level U).
Horizontal Canal	
Insufficient evidence	No recommendation can be made (Level U).
Anterior Canal	
Insufficient evidence	No recommendation can be made (Level U).

Question 1: What maneuvers effectively treat posterior canal BPPV, horizontal canal and anterior canal BPPV?



Figure 1. Membranous labyrinth depicting the orientation of the semicircular canals (ducts).

Figure 2. Canalith repositioning procedure

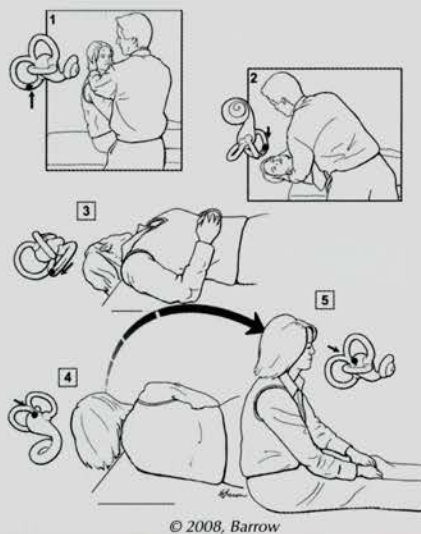


Figure 2. A step-wise method of performing the canalith repositioning procedure for Right BPPV.

Step 1 – Seat the patient on a table positioned so they may be taken back to the head hanging position with the neck in slight extension. Stabilize the head with your hands and move the head 45 degrees toward the side you will test. Move the head, neck and shoulders en bloc to the head hanging position (Step 2).

Step 2 – Observe the eyes, hold them open if necessary. Wait for all the nystagmus to stop and then give it about half as long as it lasted (usually about 10 seconds after it stops).

Step 3 – Keeping the head back with the neck slightly hyperextended, turn the head about 90 degrees toward the opposite side and wait 20-30 seconds. Hold the patient's head to avoid neck strain.

Step 4 – Roll the patient all the way on to his/her side and turn the head to face the ground and hold it there 10-15 seconds. There should be no nystagmus. If they report a little dizziness, it is usually a favorable sign that the particles are moving and the treatment will be successful.

Step 5 – Keeping the head somewhat in the same position toward the shoulder, have the patient sit up. Hold on to them for a moment because some patients feel a sudden but very brief tilt when sitting up.

REPEAT: After waiting 30 seconds or so, repeat the whole maneuver. If there is no paroxysmal nystagmus or symptom during Dix Hallpike positioning (Steps 1, 2) when repeated, this suggests that CRP has been successful.