



Benign Paroxysmal Positional Vertigo (BPPV)

Helpful information for better health for Canadian patients from Dr. Bouchard

What is benign positional vertigo (BPV)?

BPV, also known as paroxysmal positional vertigo, is a spinning sensation of the head (vertigo) brought on by a certain position of the head, usually sudden changes of position. The word “benign” means it is not a serious condition and is likely to get better eventually.

What is the cause of BPV?

In most people the cause is unknown and there is often no precipitating cause, but it can follow viral infections or accidents causing head or neck injuries. There are two theories to explain BPV:

1. There are tiny pieces of floating debris-like small crystals in the fluid of the balance centre of the inner ear (the labyrinth). These bits of sediment upset the balance centre when disturbed. This is the most favoured theory.
2. A problem exists in the neck, usually a “kink” in some of the swivel joints. The neck is connected to the balance centre by special nervous pathways.

What are the symptoms?

- A brief attack of severe dizziness (vertigo), usually for about 10-30 seconds, that comes on a few seconds after a certain head movement.
- Quickly subsiding dizziness — it is a self-correcting problem.

The changing positions that provoke an attack can be:

- Tilting the head backwards.
- Changing from a lying to a sitting position.
- Lying on one side.
- Turning the head to the side.
- Rolling over in bed.

Who gets BPV?

Although it can occur at all ages, the elderly are affected most. It is the most common cause of vertigo in the elderly. Women are twice as likely

as men to get it. BPV is a surprisingly common problem.

How long do bouts of BPV last?

Each attack usually lasts less than 30 seconds but can last 1-5 minutes. The attacks tend to come in bouts but usually settle within a few weeks. Most people are able to return to work within a week. The bouts tend to come back after months or years, but some people only ever have one attack.

What are the effects of BPV?

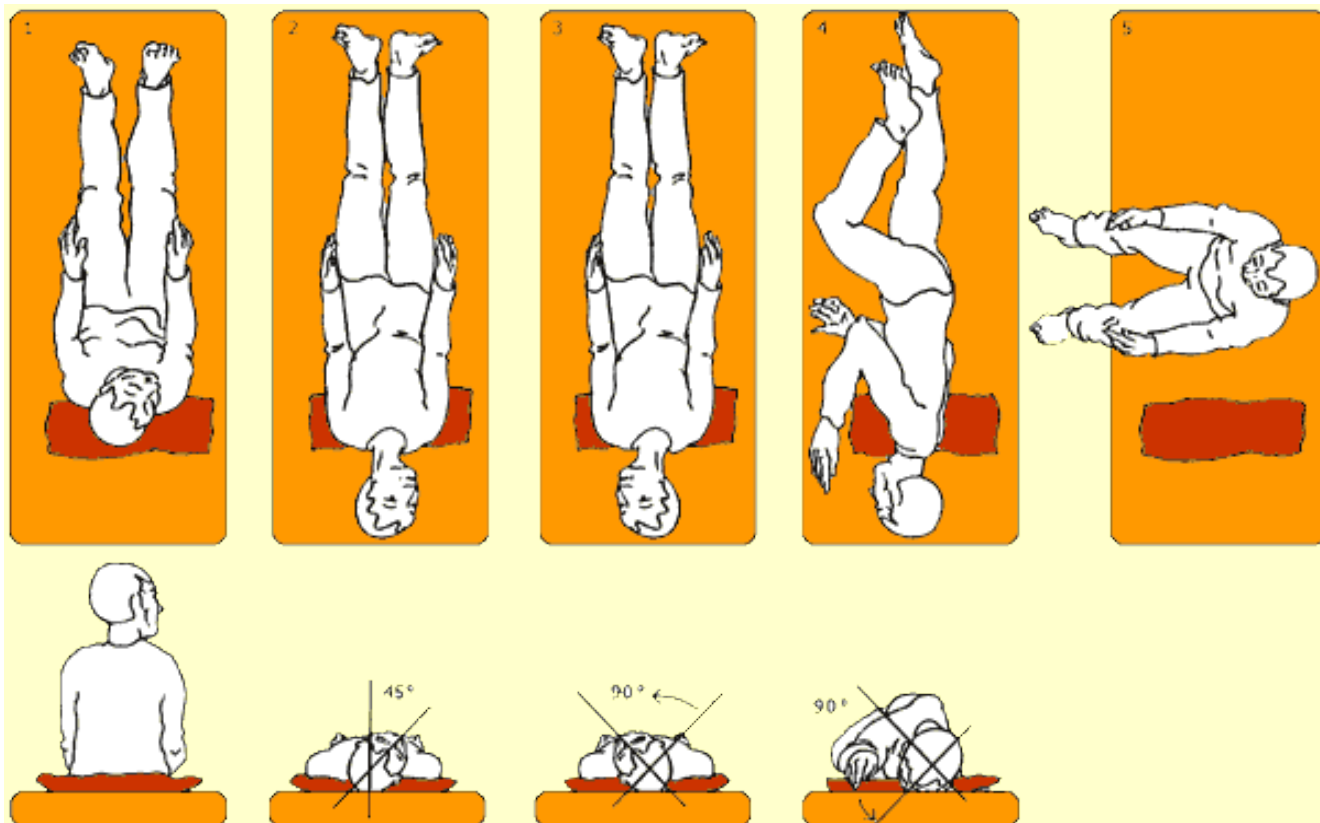
There are usually no ill effects in the long run. Unlike some other causes of severe dizziness, there is usually no vomiting, tinnitus (ringing in the ears) or deafness. Patients have to be careful with driving.

What is the treatment?

There is no special treatment. Drugs are not effective at preventing the attacks. It is a matter of allowing the bouts to run their course, but there are things that may help:

- Avoid head positions that provoke the attack.
- Obtain mobilisation treatment to the neck by your doctor or a qualified therapist.
- Do exercises as described on the following pages.

Self-treatment of benign positional vertigo (right)



1. Start sitting on a bed and turn your head 45° to the right. Place a pillow behind you so that on lying back it will be under your shoulders.

2. Lie back quickly with shoulders on the pillow and head reclined onto the bed. Wait for 30 seconds.

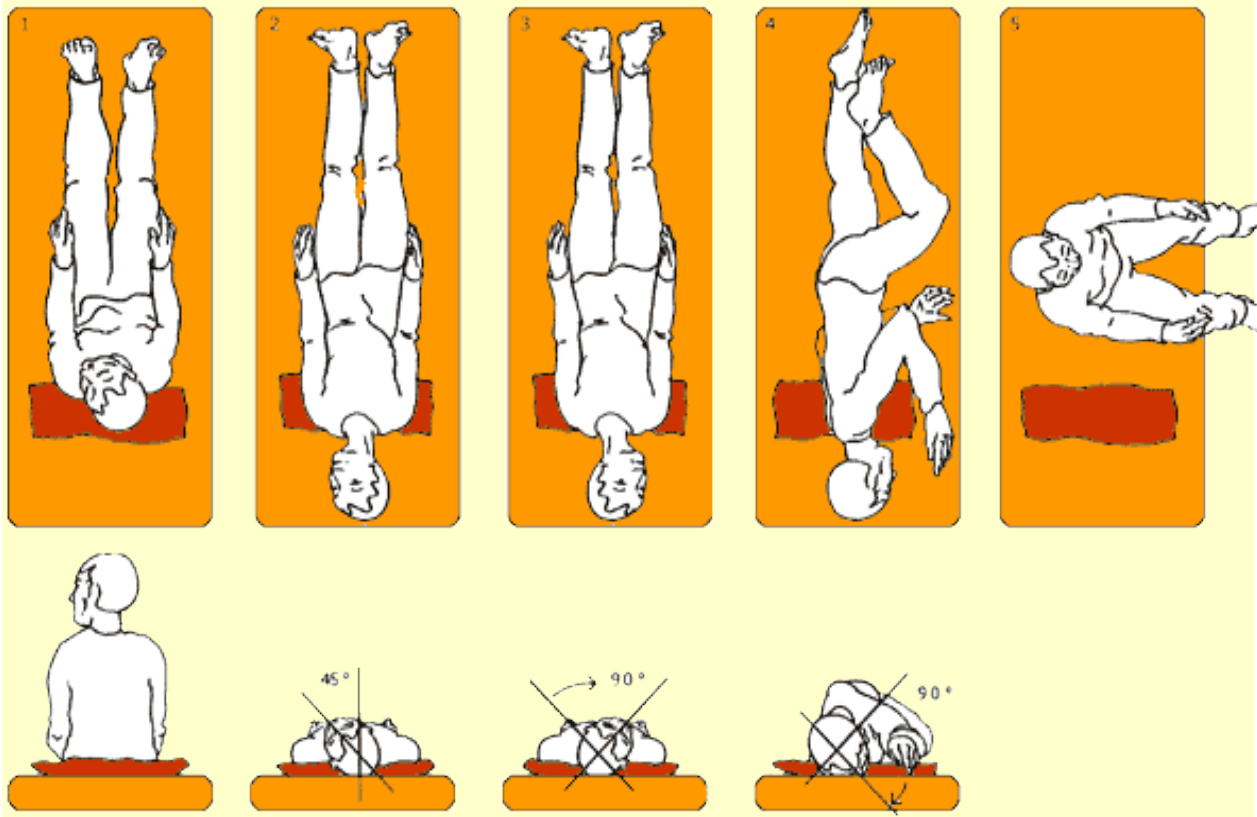
3. Turn your head 90° to the left (without raising it) and wait again for 30 seconds.

4. Turn your body and head another 90° to the left and wait for another 30 seconds.

5. Sit up on the left side.

This maneuver should be carried out three times a day. Repeat this daily until you are free from positional vertigo for 24 hours.

Self-treatment of benign positional vertigo (left)



1 Start sitting on a bed and turn your head 45° to the left. Place a pillow behind you so that on lying back it will be under your shoulders.

2 Lie back quickly with shoulders on the pillow and head reclined onto the bed. Wait for 30 seconds.

3 Turn your head 90° to the right (without raising it) and wait again for 30 seconds.

4 Turn your body and head another 90° to the right and wait for another 30 seconds.

5 Sit up on the right side.

This maneuver should be carried out three times a day. Repeat this daily until you are free from positional vertigo for 24 hours.

INSTRUCTIONS FOR PATIENTS AFTER OFFICE TREATMENTS (Epley or Semont maneuvers)

1. *Wait for 10 minutes after the maneuver is performed before going home.* This is to avoid "quick spins," or brief bursts of vertigo as debris repositions itself immediately after the maneuver. Don't drive yourself home.

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2. *Sleep semi-recumbent for the next night.* 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 (see figure 3). 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 the head back. Shampoo only under the shower. Some authors suggest that no special sleeping positions are necessary (Cohen, 2004; Massoud and Ireland, 1996). We, as do others, think that there is some value (Cakir et al, 2006)

3. For at least one week, *avoid provoking head positions* that might bring BPPV on again.

- Use two pillows when you sleep.
- Avoid sleeping on the "bad" side.
- Don't turn your head far up or far down.

Be careful to avoid head-extended position, in which you are lying on your back, especially with your head turned towards the affected side. This means be cautious at the beauty parlor, dentist's office, and while undergoing minor surgery. Try to stay as upright as possible. Exercises for low-back pain should be stopped for a week. No "sit-ups" should be done for at least one week and no "crawl" swimming. (Breast stroke is OK.) Also avoid far head-forward positions such as might occur in certain exercises (i.e. touching the toes). Do not start doing the Brandt-Daroff exercises immediately or 2 days after the Epley or Semont maneuver, unless specifically instructed otherwise by your health care provider.

4. *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.

Give Patient Home Epley Maneuver to perform three times a day. Repeat this daily until free from positional vertigo for 24 hours.

Following the maneuvers instruct the patient: Wait 10 minutes before leaving the office, Avoid sudden head movement, Have another person drive you home.

HOME Left EPLEY MANEUVER

Typically 3 cycles are performed just prior to going to sleep. Best to do them at night rather than in the morning or midday. If they become dizzy following the exercises, then it can resolve while one is sleeping. The mirror image of this procedure is used for the right ear. Repeated every night for a week. The head is turned to the side of vertigo/nystagmus during the Dix/Hallpike Test.

Recommended Websites and links:

Timothy C. Hain, MD

<http://www.dizziness-and-balance.com/disorders/bppv/bppv.html> (Pg modified 11-21-09)

Dix-Hallpike Test

http://www.neurology.org/content/vol70/issue22/images/data/2067/DC2/Video_1.wmv

To see a movie of BPPV

nystagmus, a13 meg download - (<http://www.dizziness-and-balance.com/disorders/bppv/movies/bppv.avi>)

Epley maneuver

(<http://www.dizziness-and-balance.com/disorders/bppv/bppv.html>).

We offer a home treatment DVD that illustrates the home Epley exercises.

Vestibular Disorders Association

(VEDA) <http://www.vestibular.org/>).

Brandt Daroff exercise VIEW MOVIE AT

http://www.neurology.org/content/vol70/issue22/images/data/2067/DC2/Video_8.wmv.

Mayo Clinic Staff Original Article: <http://www.mayoclinic.com/health/vertigo/DS00534>

Outcome Tools

The Berg Balance Scale

http://www.aahf.info/pdf/Berg_Balance_Scale.pdf

Dizziness Handicap Inventory

<http://web.missouri.edu/~proste/tool/vest/Dizziness-Handicap-Inventory.pdf>

Geriatric Depression Scale

<http://www.stanford.edu/~yesavage/GDS.html>