Benign Paroxysmal Positional Vertigo

Information for patients and families

Read this booklet to learn about:

• What Benign Paroxysmal Positional Vertigo (BPPV) is
• Symptoms
• How your doctor will diagnose it
• Treatment options
**What is BPPV?**

BPPV is a balance disorder of the inner ear that causes vertigo, dizziness and other symptoms. It happens when calcium crystals inside the ear become loose and begin collecting in the canal at the back of the inner ear.

**How does this happen?**

The organ in your inner ear that helps you keep your balance is made up of 3 semicircular **canals**, a **saccule** and a **utricle**, all connected by **inner ear fluid**.

- The utricle and saccule have sense receptors loaded with tiny crystals that help detect small movements of your head.
- If some of these crystals become loose, they will float freely in the inner ear fluid.
- When this happens, moving your head in certain positions will cause these crystals to shift and travel within the fluid of the semicircular canal. This will irritate the balance organ inside your inner ear, and will send false signals to your brain that will make you dizzy.
What causes BPPV?
There are a few reasons why crystals may become loose inside your inner ear and cause BPPV, including:

- If you have had a mild to moderate head injury (including whiplash)
- If you have had Vestibular Neuritis (an inner ear infection)
- If you have Meniere’s Disease (combination of vertigo, tinnitus (ringing in the ears) and hearing loss)

For many older people, dizziness is often due to BPPV. In half of all cases, BPPV happens for no known reason.

What are symptoms of BPPV?
Many people with BPPV say that one symptom they have is a short spinning (vertigo) or falling sensation that happens when they sit up to get out of bed, roll over or lie back in bed or, bend forward to pick up something on the ground. Some people complain that they also feel nauseated afterward.

They also say that:

- The vertigo usually lasts a few seconds to 1 minute
- You may have several attacks of these symptoms every day
- These attacks can happen for a few days or few weeks, but, in some cases, the attacks can last as long as a few months
- Most of the time, the BPPV symptoms will go away within a few weeks without any treatment
How will my doctor know that I have BPPV?

Your doctor will diagnose BPPV based on your symptoms and after an examination. Your doctor will also look for “nystagmus” (“nis-tag-mus”), or jumping of your eyes, when doing positional manoeuvre tests.

The most common manoeuvre will be the “Dix-Hallpike” test.

- The doctor asks you to sit on the bed, then turns your head and helps you lie down quickly to one side.
- This quick movement causes the loose crystals in your inner ear to become displaced, triggering your dizziness.
- At the same time, the doctor will look at your eyes for “nystagmus”.
- Once both ears have been tested, the doctor decides which ear and which semicircular canal has been affected by BPPV.

To find out more about your inner ears, your doctor may also send you for a hearing test or other balance tests, such as an ENG (electronystagmography).

How will my BPPV be treated?

“Particle repositioning manoeuvres” treat BPPV and can be done in your doctor’s office in about 15 minutes.

Two common repositioning techniques used are the “Epley manoeuvre” and the “Semont-Liberatory manoeuvre”.

Epley Manoeuvre

For this procedure, your doctor does the following steps:

1. Asks you to sit on the bed with your head turned to the side that brings on your dizzy symptoms.
2. Helps you lie down quickly with your head placed over the end of the bed and supports you with his or her hands.
3. Guides you through 3 or more head movements over the next few minutes. These movements help move the crystals out of your semicircular canal and into the utricle where they will not cause irritating symptoms.
Semont-Liberatory Manoeuvre

For this manoeuvre, your doctor does the following steps:

1. Asks you to sit on the bed.
2. Helps you lie down on the side that brings on your dizzy symptoms with your face turned upwards about 45 degrees.
3. Brings you quickly to a sitting position and rapidly swings you to the opposite side with your face turned downwards by 45 degrees. You will then stay in this position for 5 minutes.

The manoeuvres effectively treat your BPPV symptoms.

Are there any other treatments for BPPV?

Other treatments for BPPV may also include vestibular physical therapy exercises to help you “retrain your brain”.

- The “Brandt-Daroff” positional exercises are rapid head and body tilts that can be done at home. Your doctor or physiotherapist will show you how to do these exercises and tell you how often to do them.
- “Canal-plugging” surgery may be an option to treat BPPV if all therapies have been considered and tried (and the correct ear and affected semicircular canal have been identified).

Surgery for BPPV is only recommended if you have had symptoms for at least 6 to 12 months and these symptoms are causing unwanted changes to your lifestyle.
Are there any possible side effects or complications with these manoeuvres?

You may have vertigo and nausea during any of the repositioning manoeuvres, but this should settle afterwards.

You may also feel slightly off-balance and have a sick feeling. This should go away over the next couple of days.

Who can I contact for more information about BPPV?

To learn more about BPPV, or to ask a question, please call:

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