

Benign Positional Paroxysmal Vertigo (BPPV)

This is a very common cause of dizziness. It is caused by dislodged crystals in the inner ear.

These crystals are usually firmly attached to a part of inner ear which detects gravity, so that you know what is up or down.

Sometimes these crystals can become dislodged and end up in a part of the inner ear which has “spin” sensors used to detect head turns.

These crystals can then hit the spin sensors in this part of the ear and patients experience a sudden sensation of spinning, either when turning over in bed, bending over or looking up. It only lasts a few seconds to a minute, but it is quite disturbing. This is the “canalolithiasis” variant of BPPV.

It is provoked by lying down, sitting up in bed, rolling over in bed onto the affected ear, bending over to tie shoelaces and extending the head backwards when reaching up to a shelf above eye level. It is often called “morning vertigo” and is worse just after waking up.

Not infrequently the patient experiences a persistent imbalance after the short-lived spinning sensations. This is due to the recurrent attacks impairing the compensation response from the brain.

Another cause of the patient experiencing a persistent imbalance is due to the floating crystals sticking to the spin sensors. This is the “cupulolithiasis” variant of BPPV.

Other than dizziness there is no change in hearing or any buzzing in the ears. The dizziness is not usually associated with nausea.

It is often more common in the elderly, people who have had long bed rests, Ménière’s disease, migraine, head injury, vestibular neuritis and yoga exercises.

Spontaneous resolution usually occurs but in 1/3rd of cases it can take many months.

Examination

This reveals a characteristic rapid eye movement (rotational geotropic nystagmus) when the head is put into specific positions by the doctor.

The characteristic rapid eye movements of the posterior canal BPPV is provoked by the Dix-Hallpike manoeuvre. The characteristic rapid eye

movements of the horizontal canal BPPV is provoked by the supine roll manoeuvre. This then determines which therapeutic manoeuvres are used to cure the condition.

Of importance the examination will reveal no abnormality of brain function.

Treatment

Therapeutic crystal repositioning manoeuvres are used to cure the condition and are very effective with up to a 90% success rate if mastoid vibration is used.

However, 50% of patients will get another attack in the next 10 years.

The specific manoeuvres and techniques are as follows: -

Posterior canal canalolithiasis is treated with either Epley's, Semont's or Semont's Plus manoeuvres.

Horizontal canal canalolithiasis is treated with the Gufoni manoeuvre.

In patients with marked general and neck immobility the use of wrapping in blankets to perform the procedure and also the use of the TRV (Thomas Richard-Vitton) rotational chair.

Last updated: 07.07.2022