

BENIGN POSITIONAL VERTIGO

(BPV, BENIGN PAROXYSMAL POSTIONAL VERTIGO, BPPV)

Within the balance mechanisms of the inner ear, two structures (utricle and saccule) are used to detect acceleration and head tilt. This is done via jelly-like masses resting on a sheet of cells equipped with fine sensory hair-like filaments that detect movement of the overlying mass. The sensory cells connect to the balance nerves to the brain and signal these movements to the brain as being due to acceleration or tilt movements.

The gelatinous material contains crystalline particles that may become dislodged if the structures are subjected to severe vibration, usually as a result of a head injury or noise exposure.

When dislodged, the crystals float in the fluid that bathes the inner ear structures, and if the head is moved in particular patterns, the crystals accumulate on the sensory hair cells that detect rotatory movement, causing aberrant signals that are felt as severe spinning sensations: rotatory vertigo.

Characteristics

The aberrant signals are generated by specific movements ([Inner Ear Conditions](#)), characteristically when arising, looking up sharply, rolling over in bed (usually to a specific side), or by sudden horizontal turning actions. The sensation of spinning generally lasts for a period of up to 10 seconds, approximately, then abating. There is no directly related hearing loss tinnitus or other ear symptoms, but a history of trauma or noise exposure may be given.

The symptoms may be provoked by body and head movement assessments (Hallpike manoeuvres), which may also produce visible eye twitching (nystagmus). More sophisticated balance testing may confirm this phenomenon, but show no other findings. Audiological testing may confirm previous hearing damage.

Treatment

Fortunately, the condition generally responds well to specially targeted physiotherapy (Epley manoeuvres), which moves the offending particles away to less troubled sites in the inner ear. These exercises can be repeated at home to control the problems, as required.

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Other Locations

Beenleigh

Sunnybank

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Less commonly, troublesome dizziness requires surgery on the inner ear to control the problem (posterior canal occlusion). This is not without risk, and care should be taken not to confuse BPV with other forms of positional vertigo that are due to brain damage rather than to the ear.

The problem is diagnosed essentially from its brief occurrences in specific trigger situations and the lack of other inner ear manifestations ([Inner Ear Symptoms](#)).

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