

## What is PPPD:

Persistent Postural Perceptual Dizziness is a condition where the brain does not seem to trust the information it is getting from the inner ear. This results in the brain being in an alarmed or sensitized state, resulting in dizziness and unsteadiness. PPPD is therefore classified as a chronic functional vestibular disorder. It is not a structural or psychiatric condition.

## Stats:

- Estimated >50% prevalence rate for those presenting for evaluation of their dizziness at a specialized dizziness centre.
- Estimated that 25% of those with a vestibular condition develop PPPD.
- Average age is mid 40's, with a range from adolescence to late adulthood.
- More common with females.



## Symptoms:

Varies from person to person, but will be described as some form of:

- Persistent dizziness, unsteadiness and/or non-spinning vertigo.
- Present throughout most of the day for hours at a time.
- Worse when one is up and about, especially in visually busy environments.

## Cause:

- The exact processes underlying PPPD are not fully known, but it is often preceded by other conditions.
- The most common precipitating conditions are vestibular disorders (40-50% of cases), panic attacks or anxiety that manifest prominent dizziness (15% each), concussive injuries of the brain or whiplash injuries of the neck (10-15%), and autonomic disorders (7%).
- Other conditions that are capable of producing vertigo, unsteadiness or dizziness, or altering balance function (i.e. cardiac dysrhythmias, adverse drug reactions) precipitate the disorder less commonly (collectively 3%).
- Some, however, develop PPPD insidiously.

## How is PPPD Treated?

Treatment typically consists of one or a combination of the following:

- Education regarding prognosis, treatment principles, and the need to take an active role in one's therapy.
- Vestibular therapy to desensitize the vestibular system and address any balance issues.
- Medication such as SSRI and SNRIs not necessarily because you are depressed, but to calm down the nervous system.
- Cognitive behavioural therapy and stress management.
- Sleep hygiene.
- Addressing other medical conditions.
- Goal setting



## Expectations:

- PPPD responds slowly to treatment and can take months (i.e. 3-4 months) to see progress.
- Average duration from time of consultation was 4.5 years, with some experiencing it indefinitely .
- Impact on daily activity varies from few limitations to not being able to work.
- The natural history is that the majority of patients remain symptomatic without treatment, regardless of the initial cause.



## Diagnostic criteria:

PPPD is not diagnosed based on physical examination, lab tests, or imaging, but rather by a history defined by criteria A-E below. All five criteria must be fulfilled to make the diagnosis.

- A.** One or more symptoms of dizziness, unsteadiness, or non-spinning vertigo are present on most days for 3 months or more.
- Symptoms last for prolonged (hours-long) periods of time, but may wax and wane in severity.
  - Symptoms need not be present continuously throughout the entire day.
- B.** Persistent symptoms occur without specific provocation, but are exacerbated by three factors:
- Upright posture,
  - Active self generated movement or passive motion (ie. riding in a vehicle or elevator, riding an animal, being jostled in a crowd) without regard to direction or position, and
  - Exposure to moving visual stimuli (ie. passing traffic, busy patterns on the floors, busy hallways) or complex visual patterns.
- C.** The disorder is precipitated by conditions that cause vertigo, unsteadiness, dizziness, or problems with balance including acute, episodic, or chronic vestibular syndromes, other neurologic or medical illnesses, or psychological distress.
- When the precipitant is an acute or episodic condition, symptoms settle into the pattern of criterion A as the precipitant resolves, but they may occur intermittently at first, and then consolidate into a persistent course.
  - When the precipitant is a chronic syndrome, symptoms may develop slowly at first and worsen gradually.
- D.** Symptoms cause significant distress or functional impairment.
- E.** Symptoms are not better accounted for by another disease or disorder.

## References:

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