

Persistent Postural-Perceptual Dizziness (PPPD)

This leaflet contains information about a condition called **Persistent Postural Perceptual Dizziness (PPPD)**. If you have any further questions or concerns, please do not hesitate to contact your GP or health care professional.

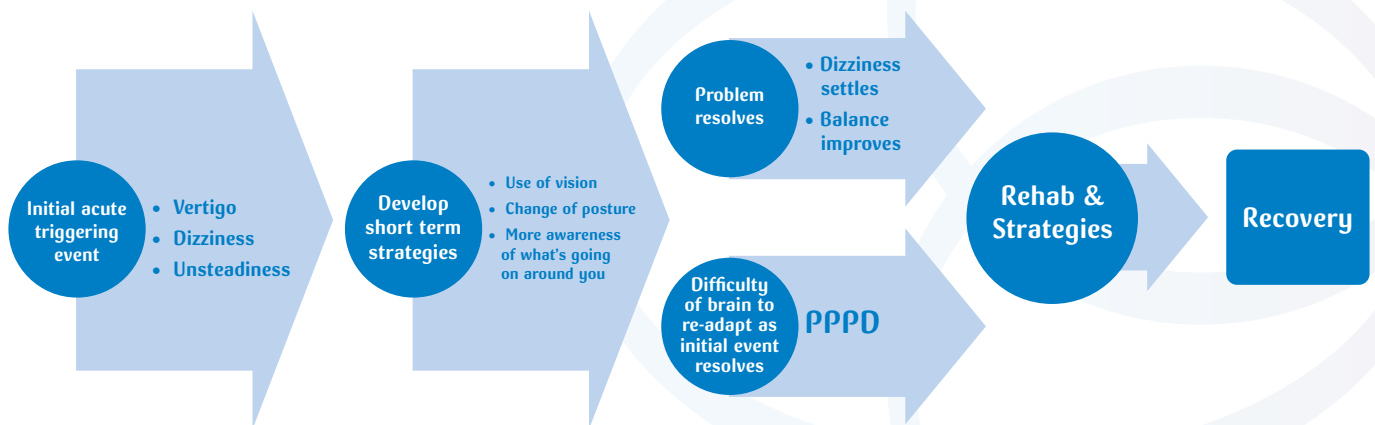
What is Persistent Postural-Perceptual Dizziness?

Persistent Postural-Perceptual Dizziness (PPPD) is a chronic vestibular condition which causes persistent sensations of dizziness and/or unsteadiness. It is sometimes referred to as a functional neurological disorder, which means that it is a condition that is thought to originate from changes that occur in the way that the brain functions as opposed to a structural problem. If we were to imagine the brain as a computer, it could be described as being similar to a software issue, as opposed to a problem with the hardware. PPPD is relatively common and symptoms generally involve non-vertiginous dizziness, often described as a rocking, bobbing, or swaying sensation, as well as associated unsteadiness. These symptoms are generally fairly continuous and have been present for more than three months. For some people,

these symptoms may ease after laying down. For many they are worse when upright and moving, with quick or repetitive head or body movements, and with exposure to motion-rich or complex visual environments. For example, many people with PPPD struggle with supermarkets, busy environments with large moving crowds, or when watching scrolling screens or fast paced movies. Anxiety and depression may also feature, and many individuals report increased fatigue and cognitive difficulties (e.g., brain fog).

Why do I get Persistent Postural-Perceptual Dizziness?

PPPD is thought to occur due to a maladaptive process which happens within the brain following a triggering event. Generally this initial event involves the symptoms of vertigo, dizziness, or unsteadiness. This could be due to another vestibular condition (e.g. BPPV, vestibular neuritis, or vestibular migraine), but can also be due to other causes (e.g., panic attack, cardiac event, or even a fall). In response to this initial event the brain changes the way that it perceives and processes information related to dizziness and balance. This



Adapted from Staab, Behavioural Neuro-otology in Bronstein (ed), Oxford Textbook of Vertigo.

may involve a greater reliance on the other sensory systems which contribute to your balance control (e.g., vision or proprioception), changes in the way that you stand and move, as well as an increased awareness (hypervigilance) of how you are moving and what is happening within in your environment. These changes are thought to be protective strategies of the brain for the initial event, but that for people with PPPD the brain continues to remain on 'high alert' and continues to rely on these strategies even after the initial event has resolved. Often people with PPPD have predisposing factors, behavioural responses, and perpetuating factors which contribute to their presentation.

How is PPPD diagnosed?

PPPD is generally diagnosed based on your history and presenting symptoms. There are diagnostic criteria that your consultant will have considered when providing you with a diagnosis. Generally with PPPD many of the tests and investigations which are conducted (e.g., MRI/CT scan of the brain and vestibular function tests) may return normal. It is important to recognise that these tests are used to aid diagnosis, and rule out other conditions. This does not mean that your symptoms are not real. Sometimes these tests may also be abnormal as a result of other comorbid conditions, including that which may have contributed to the initial development of the PPPD.

What is the treatment for Persistent Postural-Perceptual Dizziness?

The three main options for treatment of PPPD include; vestibular rehabilitation, psychological therapy (e.g., cognitive behavioural therapy), and medication (typically selective serotonin reuptake inhibitors (SSRIs) and selective norepinephrine reuptake inhibitors (SNRIs). Further large-scale studies which have investigated the effectiveness of these treatments on people living with PPPD is needed, but these are emerging and there are a number of smaller studies which support one or more in their effectiveness. Some people

respond better to one type of therapy than others, but for many a combination is ideal. Education and an understanding of the diagnosis is often one of the most important aspects of treatment, as is an individualised treatment plan which considers the unique contextual factors of each case.

Can Physiotherapy help me manage my Persistent Postural-Perceptual Dizziness?

A physiotherapist who specialises in vestibular rehabilitation will be able to provide advice, education, and guidance about your presentation. This may include specific information about PPPD, as well as general recommendations regarding lifestyle behaviours and possible modifications which may be contributing to your presentation. Your physiotherapist will also likely give you vestibular rehabilitation exercises designed to help you become less sensitive to activities that provoke your symptoms. Often this will involve you being given a program of specific exercises for you to do at home. These exercises are generally progressed over time, depending on the individual and their circumstance, but will often require follow-up with your physiotherapist for further review and guidance. With time and practice these exercises and strategies can help many people reduce their symptoms of dizziness and unsteadiness, and improve their ability to do every day activities. Your physiotherapist will often also be able to provide guidance as to whether you may need further investigations or input from other health professionals and is able to facilitate communication between different members of your healthcare team

Other Sources for information:

vestibular.org/article/diagnosis-treatment/types-of-vestibular-disorders/persistent-postural-perceptual-dizziness/

neurosymptoms.org/en/symptoms/fnd-symptoms/functional-dizziness-pppd/