



Therapy for vertigo, dizziness and imbalance

What is a vestibular dysfunction?

Vestibular dysfunctions occur when parts of the inner ear and/or brain that control equilibrium and balance are damaged by disease, age or injury. Vestibular dysfunctions can be caused by mechanical, vascular, neural or even medication-related changes.

Although the restoration of vestibular functions is very small, you can learn to function more successfully through compensation, which is when the brain learns to use other senses to substitute for the non-functioning vestibular system.

What are the common symptoms?

- Vertigo and dizziness
- Imbalance and spatial disorientation
- Vision disturbance
- Spontaneous eye movement
- Hearing changes
- Cognitive/psychological changes

Other symptoms:

- Nausea and vomiting
- "Seasick" feeling
- Sensation of fullness in the ears
- Ear pain
- Headaches
- Slurred speech

What is vestibular rehabilitation therapy (VRT)?

Vestibular rehabilitation therapy is a specialized form of therapy used to treat primary and secondary symptoms caused by vestibular disorders.

VRT is a systemic exercise-based program designed to treat vertigo and dizziness, gaze instability and/or imbalance.

Although damage to the vestibular system is irreversible, VRT can significantly reduce or eliminate abnormal responses to motion, as well as improve or restore head and eye coordination and equilibrium. You can learn to use compensatory strategies to retrain your brain to correctly interpret sensory input from your surroundings.

What is the goal of VRT?

The goal of VRT is to use evidence-based exercises to address your specific impairments in order to teach the brain how to compensate. There are three methods of exercise typically utilized:

1. **Habituation**
2. **Gaze Stabilization**
3. **Balance Training**

Habituation

- Used to treat dizziness by repeating motions that provoke symptoms to reduce the brain's error response.
- Incorporates vestibular and vision training by using specific head movements at certain speeds to retrain the brain.

Gaze Stabilization

- Used to strengthen the reflex between eyes and inner ears so vision can be clear and focused during head movement.
- Useful for patients who report that their vision is interrupted when reading or trying to identify objects, especially during movement.

Balance Training

- Used to improve static and dynamic balance so that daily activities can be performed more easily.
- Balance exercises are designed to improve your reactions to environmental barriers to reduce fall risk and improve confidence on varying surfaces or with obstructed vision.

What should be expected from VRT?

VRT is typically performed in an outpatient setting. Therapy begins with a comprehensive assessment including a detailed patient history and evaluation of symptoms.

You will be seen by a licensed physical or occupational therapist to develop a customized plan of care based on the results of the assessment and your goals.

Patient and caregiver education is a crucial component of successful VRT. It is important for you to understand the mechanism behind your vestibular symptoms, so that you understand the importance of your prescribed exercise plan. Through a team approach, you and the therapist can determine the most optimal plan for how to overcome these debilitating symptoms and improve the functionality and quality of everyday life.

