

Balance & Vestibular Therapy

Medical Reviewer: Ninoska Alvarez

Last Updated: April 9, 2024

Dizziness and feeling out of balance can make it a challenge to perform even the most basic daily activities. This can negatively impact our quality of life, our independence and limit us in doing the activities that we enjoy.

Brooks provides specialized treatment for balance disorders resulting from age, injury or illness. We have therapists who have extensive training in vestibular and balance rehabilitation, as well as specialized equipment that allows for comprehensive assessments and balance conditioning. Our certified specialists perform a comprehensive evaluation to identify underlying impairments that cause balance disorders and to design an individualized treatment plan. We offer balance and vestibular therapy at several locations throughout Northeast Florida.

Using the most current techniques backed by evidence-based practices, we can help you return to normal function as quickly as possible to get you back to what you enjoy most.

Conditions we help treat

- [Acoustic Neuroma](#)
- [Acute and chronic dizziness](#)
- [Central vestibular dysfunction](#)
- [Falls](#)
- [Imbalance/disequilibrium](#)
- [Labyrinthitis](#)
- [Meniere's Disease](#)
- [Motion sensitivity](#)

- [Positional vertigo/BPPV](#)
- [Vestibular Neuritis](#)
- [Visual Vertigo](#)

What is balance therapy?

Balance Therapy teaches the brain to better utilize information from 3 sensory systems to produce balance reactions that help stabilize your body and keep you upright. Balance reactions improve as you challenge your balance or cause yourself to feel unsteady because the brain must learn to process information and produce balance reactions more efficiently to keep you upright. General balance issues occur as our bodies decline with age and/or as we develop health issues that affect our sensory systems; such as, peripheral neuropathy, neurologic diagnosis such as, [stroke](#), [multiple sclerosis](#), Parkinson's; etc.; vestibular dysfunction, or visual changes such as, macular degeneration.

[Balance training](#) appears to be one of the best ways to prevent falls. Studies have found that balance exercises, combined with other interventions, have been able to significantly decrease falls (up to 17% decrease) as compared to completion of the interventions alone. In fact, strengthening, walking, and stretching when completed on their own did not significantly decrease falls. Balance training can include challenges to the body when attempting to hold its position in space, challenges while the body is in motion or when performing more than one task at a time.

What is vestibular rehabilitation therapy (VRT)?

If you are dizzy and/or off balance, or if you have experienced a recent bout of spinning of the environment, you may have a dysfunction of your inner ear, also known as your [vestibular system](#). This portion of the inner ear plays an important role in your balance and coordination of your head and eye movement. Dysfunction of the inner ear can be caused by inflammation or

trauma, which may result in symptoms of imbalance, dizziness, blurred vision, and sensitivity to visual stimulation/movement.

The goal of vestibular rehabilitation is to retrain the brain to better process and organize information from the inner ear, helping understand its “new normal” after a dysfunction of the system occurs. This process involves repetitive stimulation of the inner ear via movement to help the brain utilize the remaining information from the inner ear more effectively. Your brain will also utilize information from your other two sensory systems (vision and muscle/joint information) to promote overall improvements in balance and dizziness to help you return to your normal activities.

What are the indications for therapy?

If a patient answers yes to one or more of the questions, a referral to vestibular and balance rehabilitation may be appropriate:

1. Have you fallen in the last 6 months?
2. Do you have a fear of falling?
3. Do you experience sensations of the room spinning when you get in or out of bed or other changes in positions?
4. Have you limited your activity due to dizziness or imbalance?

What should patients expect from vestibular rehabilitation?

Upon arrival to your first appointment, you will be evaluated by a [physical therapist](#) that is specially trained to evaluate and treat patients with dizziness and imbalance. The assessments will include observing your posture, balance reactions, functional movements, and compensatory strategies. After the evaluation, your therapist will provide education on the exam findings and goals for your recovery, as well as answer any questions. Lastly, if agreed upon, you will schedule the recommended follow-up visits for treatment, typically 2 times per week for 8-10 weeks depending on your

specific deficits and impairments.

Each treatment session is an hour long. It involves standing and walking, as well as exercises specific to reflexes controlled by the inner ear. The physical therapist will work with you to determine a series of head, eye, and body movement exercises appropriate for each phase of recovery; tailoring the interventions to your individual needs. These specific exercises will challenge your balance and help your brain relearn how to interpret and utilize messages from your inner ear to help improve your balance and dizziness.

The exercises should cause a mild to moderate increase in dizziness for only a few seconds. This slight increase in symptoms in the short-term helps the brain make permanent changes to decrease dizziness in the long-term. You will be provided with exercises to perform at home and it is imperative that exercises are performed consistently because repetitive stimulation of the system is needed for long term benefit and effecting change in symptoms.

How is BPPV treated?

[Benign paroxysmal positional vertigo \(BPPV\)](#) is the most common cause of vertigo. It involves a mechanical issue where calcium carbonate crystals become dislodged from an area in the inner ear where normally are located and through the fluid that we have within our inner ear, travel to an area where they do not belong. As the head changes position in relation to gravity (i.e. getting in/out of bed; bending forward; tilting the head back) this debris moves and stimulates the inner ear causing a sensation of spinning. The spinning will last for a few second only- because as the particles settle, the stimulation stops, and the symptoms will as well.

There are 3 different anatomical structures within the inner ear that the debris can travel to and the location determines the appropriate treatment. The treatments involve the movement of the head/body in specific ways in an attempt to cause motion of the debris back to the original location.

How is success in VRT measured?

Patients participating in a customized, supervised vestibular rehabilitation program demonstrated statistically significant improvements across all outcomes, whereas patients provided with a home exercise program only did not.

When a patient is seen for an evaluation, a series of tests and measures are performed to determine how a patient is affected currently by their symptoms. Testing includes balance assessments that allow therapists to compare the patients' scores to scores that would be expected for their age as well as to see if the patient would be considered to be at a risk for falls. Subjective questionnaires are also administered that allow the therapist to assess how the patient perceives that their symptoms affect their overall quality of life and ability to perform daily activities.

Throughout the patient's care, these measures are reassessed. This allows for frequent comparison to determine overall progress as well as other areas where improvement may be needed.

At the [Brooks Balance Center](#), we have tracked changes in these tests for 400 patients — comparing their results for their first visit to their last. What was found was a significant improvement in their standing balance, a significant reduction in their fall risk while walking, as well as a significant improvement in their perceived impairments related to dizziness and balance.

Factors that can impact recovery

Lack of stimulation to the system

Many people with symptoms of inner ear dysfunction will limit their daily activities or even stop doing their normal activities in an attempt to avoid provoking symptoms, which often slows the recovery progress and may

prolong the duration of the symptoms.

Compliance with Home Exercise Program (HEP):

Once you have seen a therapist and a Home Exercise Program has been provided to you, compliance with the HEP is crucial. The repetition of the stimulation and having the brain process stimuli repeatedly causes long term changes, therefore if the prescribed exercises are not performed at the recommended frequency and duration then the patient will likely experience minimal improvements or relief of symptoms.

Medications and Vestibular Rehabilitation:

Benign paroxysmal positional vertigo (BPPV): The practice guideline from the American Academy of Otolaryngology-Head Neck Surgery recommends that clinicians do not treat BPPV with medication and instead advocates the use of canalith repositioning maneuvers. There has been no strong evidence to support the use of medication in resolution of BPPV. Vestibular suppressants are only recommended for short term management of severe nausea or vomiting.

Vestibular Neuritis: For the first few days of a vestibular crisis, Meclizine and other vestibular suppressants can be helpful to control severe vertigo, dizziness, and nausea. However, chronic use is counterproductive to the central nervous system's (CNS) compensation process. Vestibular suppressants decrease the CNS's ability to compensate for vestibular loss and can prolong recovery time.

Contact a vestibular rehabilitation specialist

Connect with someone at the Brooks Rehabilitation Balance Center for more information.

Our address is [10475 Centurion Pkwy N., Suite 104, Jacksonville, FL. 32256.](#)

Give us a call at [\(904\) 854-2050](tel:(904)854-2050).

Medical Reviewer

Ninoska Alvarez

Center Manager of Brooks Rehabilitation's Balance Center