What is Vestibular Dysfunction?

The vestibular system is located in the inner ears. The structures here detect information and send to the balance system in the brain. If one of the information systems is not working or damaged, the brain may not receive enough information for the balance system to function properly. This can impact your ability to participate in daily activities in your home and community and safely Age in Place.

Two recent reports through the National Institutes of Health discovered that more than one in two people who fell had vestibular dysfunction (Li et al., 2024). The prevalence vestibular dysfunction in adults aged over 40 in the USA is 35% (Vestibular Disorders Association, 2018).

Typical Symptoms:

- Dizziness A spinning or falling sensation
- Vertigo A feeling of movement or the world moving around you
- Feeling off-balance
- Light-headedness
- Some may experience ringing in the ears, sensitivity to light, or nausea.



Impact on Daily Life:

- Increased risk of falling: Individuals with chronic dizziness or imbalance are 2-3x more likely to fall (Vestibular Disorders Association, 2016)
- May lead someone to stay home more often, rather than going out.
- Can stop you from completing daily activities like cooking or exercising.

NSU Florida

Li, Y., Smith, R. M., Whitney, S. L., Seemungal, B. M., & Ellmers, T. J. (2024). Association between dizziness and future falls and fall-related injuries in older adults: a systematic review and meta-analysis. Age and ageing, 53(9), afae177. https://doi.org/10.1093/ageing/afae177 Vestibular Disorders Association. (2016). Fall Prevention. https://vestibular.org/article/coping-support/living-with-a-vestibular-disorder/age-related-dizziness-and-imbalance/fall-prevention/

Vestibular Disorders Association. (2018). About Vestibular Disorders. https://vestibular.org/article/what-is-vestibular/about-vestibulardisorders/ What Can You Do?

- **Discuss with your Physician:** Explore potential causes by discussing your symptoms, how long you've been experiencing them, and how it's affecting your daily life.
- Receive treatment from Physical or Occupational Therapy: You may receive a referral for treatment, which can include exercises, lifestyle changes, or specific movements.
- **Pace yourself:** Along with other strategies, ensure to take your time when getting up from a lying or seated position. If you sit or stand up too fast, this may increase your dizziness.
- **Consider your medications:** Discuss with your physician or a pharmacist how your medications could be contributing to your dizziness. See if you could adjust any of them or the doses.



By addressing problems with balancing, exploring the causes of dizziness, and implementing fall prevention measures we are working towards successfully Aging in Place.

Explore more about vestibular dysfunction at: <u>https://vestibular.org/</u>



What is Vestibular Rehabilitation?

Vestibular rehabilitation is therapy done by a trained physical or occupational therapist. These sessions address vestibular dysfunction with strengthening exercises, balance exercises, and coordinated head and eye movements. They also discuss with you lifestyle changes to boost your daily life and wellness, which allows you to safely Age in Place.

Goals of Vestibular Rehabilitation:

- Reduce feelings of dizziness or vertigo
- Minimize episodes of blurred vision
- Enhance balance and walking stability, while preventing falls
- Learn how to manage your symptoms safely during daily activities
- Elevate your quality of life by helping you return to all the activities that matter most to you



Focus on increasing your quality of life and reducing your risk of falls. Discuss with your physician if you think you would benefit from vestibular rehabilitation to work towards successfully Aging in Place.

Explore more about vestibular dysfunction at: <u>https://vestibular.org/</u>

NOVA SOUTHEASTERN UNIVERSITY



Vestibular Dysfunction: Referral Process



See your primary doctor if you have balance problems, dizziness, or vertigo. Discuss your symptoms, how long you've been experiencing them, and how they're affecting your daily life. Be as specific as possible. Ensure to let them know if you've experienced any recent falls.

Your physician may refer you to an Ear, Nose, and Throat (ENT) doctor or an audiologist. They will run a series of tests to determine if you have vestibular dysfunction and its type. Then, you may be referred to a physical or occupational therapist certified in vestibular rehabilitation. Therapy can treat two common types of vestibular dysfunction.

Benign Paroxysmal Positional Vertigo (BPPV)

This is when the small crystals in the inner ear break off, which sends false signals to the brain. This can make you feel dizzy or have vertigo. It often happens after lying down, turning in bed, bending over, or looking up. The feeling lasts for 15 to 45 seconds.

Vestibular Hypofunction

This is when both inner ears are not sending correct messages to the brain, which could be due to nerve damage or injury to the inner ear. This leads to unsteadiness or imbalance, blurred vision, and dizziness.

NOVA SOUTHEASTERN UNIVERSITY



Benign Paroxysmal Positional Vertigo (BPPV)

 Physical or occupational therapy can address through specific, coordinated movements of the head and body to realign the small crystals in the inner ear to the right position.

Vestibular Hypofunction

 Physical or occupational therapy can address this with exercises that help retrain your brain to process signals from the inner ears. It's normal to experience slight dizziness during these sessions.



If you are experiencing constant dizziness and imbalance, this may be vestibular dysfunction. Follow this referral process to seek treatment from a certified vestibular rehabilitation therapist. Share exact times when you have symptoms and describe how they feel. This helps them give you the right treatment. Lower your chance of falls and improve your safety at home and in your community with vestibular rehabilitation!

Explore more about vestibular dysfunction at: <u>https://vestibular.org/</u>

