

## Disequilibrium of Aging (e.g. Multifactorial Dizziness)

### What is disequilibrium of aging?

- Disequilibrium of aging refers to balance and dizziness issues that develop with age which are not attributable to distinct causes like BPV or Meniere's disease among others

### What are the symptoms of disequilibrium of aging?

- The most common symptoms are dizziness and imbalance that are relatively constant and do not worsen with particular movements
- Other symptoms include lightheadedness and vertigo (sensation of room spinning around you)

### What causes disequilibrium of aging?

- The three main components of balance (which combine to establish equilibrium) are the **vestibular system inside the ear**, our **joints** (especially ankles/knees/hips) and our **eyes**, which all combine to inform our body where it is and how it is moving in space
- Age related declines (wear and tear) in all these areas of our body combine to cause disequilibrium of aging
- Another common contributing factor to disequilibrium of aging is cumulative side effects from medications
- Common medications that can cause dizziness include:
  - o Anticonvulsants (e.g. divalproex, gabapentin, pregabalin)
  - o Antidepressants (e.g. fluoxetine, sertraline, trazodone)
  - o Benzodiazepines (e.g. Valium, Xanax, Ativan)
  - o Blood pressure medications (many)
  - o Muscle relaxants (e.g. cyclobenzaprine and metaxalone)
  - o Prescription pain medications (e.g. hydrocodone, codeine, dilaudid)
  - o Sleeping pills (e.g. Benadryl, temazepam, Lunesta and Ambien)
- If you are taking several of these medications, it may be worth reviewing your medication list with your primary care provider to identify medications that can be substituted or discontinued

### What can be done to improve my dizziness and balance?

- Exercise and physical therapy
  - o Vestibular therapy is a specific type of physical therapy aimed to strengthen the three areas that contribute to disequilibrium of aging – your vestibular system, joints and vision – and how they communicate with one another
  - o You may be prescribed vestibular therapy to work on these exercises with a trained professional
  - o For those who want to perform these exercises at home, I recommend the following resources
    - <https://www.brainandspine.org.uk/health-information/fact-sheets/vestibular-rehabilitation-exercises/>

- Youtube videos. There are many helpful videos to demonstrate how to perform exercises on YouTube. Type “vestibular exercises” into the search bar. I like the videos made available by Dr. Jon Saunders (“Home Vestibular REHAB – 20 Dizziness Exercises) and by Fauquier ENT
- Lifestyle modifications
  - Consider obtaining assistive devices such as a cane, walker or wheel chair. These devices can be crucial to improving mobility and preventing falls
  - Consider installing grab handles, carpeting, ramps, etc to improve your mobility and safety at home
- Medications
  - The most important medication change usually comes from eliminating medications that can cause dizziness. Consider reviewing your medication list with your primary care doctor
  - Medications used to treat diabetes can be crucial to preserving your vision and proprioception
  - We do NOT recommend routine medication use to combat dizziness, as these are often sedating and can increase fall risk
- Vision Optimization
  - Ensure your vision is optimized with proper glasses if needed. If you already wear glasses, consider re-checking your prescription and obtaining new glasses if necessary
  - Have glaucoma or cataracts addressed if applicable
- Cervical Spine Management
  - Consider working with a physical therapist or spine surgeon if you have degenerative joint disease that affects your cervical spine
- Inner ear surgery
  - Surgery to address dizziness is relatively uncommon, but can be used in instances for patients suffering from superior semicircular canal dehiscence, Meniere’s disease or peri-labyrinthine fistulae
  - Surgery is not performed on the inner ear for patient’s with disequilibrium of aging in whom these processes are not present