Understanding and Treating the Brain Changes That Affect Coordination

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Injury Prevention

An unsteady gait may mean nothing, but it could also have a profound impact on your health. Problems with balance are often the first indicators of Alzheimer's disease, and they continue to cause problems as the disease progresses. Although there is no cure for Alzheimer's or its symptoms, there are some ways to counteract some of the challenges to coordination, and engage in injury prevention.

How Alzheimer's Interferes With Balance

Tissue damage. Although Alzheimer's is often seen as a mental affliction, it causes permanent physical damage in the brain. As the disease progresses, it destroys the neurons and disrupts the important messages that control movement, coordination and thought. When the disease moves from a mild to a moderate stage, a person begins to lose a sense of where their body is in relation to other objects, which can result in more stumbles.

Medication. Certain medications can bring on vision changes, dizziness, drowsiness, and other symptoms that impact balance. Often, the problem can be traced to the combination of different drugs, especially for older people, whose bodies break down and absorb medications differently. So, while the drugs you take for Alzheimer's symptoms may not directly threaten your balance, the way they interact with your other medications can result in problems with coordination.

Lack of exercise. As people age or deal with a chronic illness, they tend to become less active. With less activity, stabilizing muscles in the legs and hips begin to weaken, and balance suffers. Also, stiffness in one side of the body leads to overcompensation in other muscles, and which can begin to buckle under the pressure. When these physical aspects of aging coincide with the cognitive decline of Alzheimer's, muscle weakness can have far-reaching effects on health and longevity.

Tips for Injury Prevention and Improving Balance

It may seem ambitious, but heading to the gym can do a lot of good for Alzheimer's patients of any age. Building muscle and range of motion will translate to more stability and quicker reaction times, which results in fewer damaging falls, and if you do find you're losing your balance, a better chance of recovery before the impact.

- **Seated exercises.** Seated exercises are less strenuous than movements you do from a standing position, but they can improve muscle strength and range of motion in a number of areas. You can begin with some raising, circling, and bending movements while seated in a chair, and gradually work up to standing exercises as you build muscle in the legs and torso.
- **Aquatic therapy.** The gentle resistance and natural support that water provides makes it the perfect setting for a symptom-friendly fitness routine. Aquatic therapy is especially good for patients with limited

range of motion or severe coordination problems, since the buoyancy allows for Water is also soothing and calming, which makes exercise easier to enjoy and even more therapeutic.

- **Video routines.** Some recent studies have focused on how video games (such as Wii fit) could help Alzheimer's patients stay in shape and improve balance. Along with certain accessories – like a weighted balance board – the interactive exercise routine can to keep patients engaged, and therefore more likely to complete each session and gradually build strength and coordination.

In order to make sure the exercise routine is appropriate, work with a physiotherapist who knows about the effects and progression of Alzheimer's. The plan may need to be adjusted periodically, since certain exercises or the frequency of workouts may not be suited to later stages of the disease.