

# Conditions We Treat

## Balance & Gait Disorders

Gait and balance problems are usually related to each other and can be caused by an illness, generalized weakness and deconditioning or some type of abnormality in the body. Gait problems are actually one of the leading causes of falls among older Americans. If something is wrong with your gait (the way you walk), working with a physical therapist can help restore your normal gait. Contact our office if you want to learn more about the gait and balance therapy we provide.

## What Are Balance and Gait Disorders?

Balance and gait disorders are often lumped together because the two are related. If something is “off” with your balance, your gait is likely affected. Your gait therapy will depend on the type of gait dysfunction that is impacting you. Treatment for a balance and gait disorder will usually begin with a diagnosis from your physical therapist.

Your therapist will start by simply watching you walk back and forth a few times to observe your gait. Your gait will be also be timed because the speed at which a person takes a step is often related to falling. Balance tests will analyze your risk of falling. A series of strength and range-of-motion measurements will be done to determine if there is a physical component to any gait or balance problems, such as weakness or tightness. Reflex and sensation screenings will also be done because balance and gait disorders frequently have a neurological component.

## Causes of Balance and Gait Disorders

Here are the most common types of balance and gait disorders, as well as the issues which can cause them.

- **Antalgic:** Otherwise known as “a limp,” an antalgic dysfunction is usually caused by an injured leg or foot bearing weight. People with a limp take slow, short steps and try to keep their weight shifted onto the healthy leg.
- **Generalized weakness and deconditioning:** Your muscles need movement to work at their optimum. If you tend to sit throughout the day and not move, your muscle can get weak which causes balance and walking difficulties. If you feel that your balance and walking are getting more difficult, see your physical therapist for a balance and gait assessment.
- **Cerebellar Ataxia:** People with cerebellar ataxia have a wider stance and their foot movements are often erratic. This condition often has a neurological cause, such as a stroke or muscular dystrophy.
- **Parkinsonian:** As its name suggests, this gait dysfunction accompanies Parkinson’s disease. People with Parkinson’s tend to take shorter, shuffling steps.
- **Steppage:** People with this dysfunction cannot lift their ankle and therefore lift their leg higher to take a step. Steppage accompanies conditions like neuropathy and lumbar radiculopathy.
- **Vestibular Ataxia:** This is one of the common balance problems that can lead to gait disorder. People with this condition walk unsteadily and tend to fall toward one side. Vertigo and inner ear disorders can lead to vestibular ataxia.
- **Waddling:** Waddling often relates to muscular dystrophy and myopathy. It causes a person to walk on their tiptoes while swaying side-to-side.

# How Physical Therapy Helps Balance and Gait Disorders

Once your physical therapist has diagnosed your specific problem, then you can start your balance and gait therapy.

The process will likely start with pre-gait training and gait training. In pre-gait training, your therapist will help you understand how to improve your gait. Then, you'll begin doing some simple exercises like standing and lifting one leg at a time. Walking in place and practicing how to take a proper step (making your heel contact the ground first) will also be done. Gait therapy will involve retraining your mind and body to walk correctly. The exercises used in this stage will vary, depending on whether your gait disorder is neurological or muscular in origin.

Once your gait is improving, it's on to balance therapy and coordination training. Your physical therapy will include balancing exercises to help you stabilize your walking pattern. Another option is to use neuromuscular training; this is helpful for people who have inactive muscle groups that are impacting their gait. If your specific gait problem is caused by a ligament that is paralyzed or very weak, the physical therapist will teach you how to use additional equipment to help you walk, such as a brace or a splint.

Balance and gait disorders may be incurable, especially if they are caused by a neurological condition such as a stroke. But if you begin working with a physical therapist as soon as possible, the symptoms can be alleviated and will hopefully prevent falls while at the same time, improving your quality of life.

**Contact** our office directly if you're ready to do a gait analysis and begin using physical therapy to improve your gait and balance. Visit us at Healing Hands Physical Therapy 58 Parkland Plaza, Suite 100, Ann Arbor, MI 48103.