

Foot Drop

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Foot drop, sometimes called "drop foot," is very common in the post-polio community. Before I can explain the value of physical therapy, it was important that I show exactly what it is. These graphics and this article by [Gabriela Pichardo, MD](#) explain it clearly.

Foot drop is the inability to lift the front part of the foot. This causes the toes to drag along the ground while walking. To avoid dragging the toes, people with foot drop may lift their knee higher than normal. Or they may swing their leg in a wide arc. Foot drop can happen to one foot or both feet at the same time. It can strike at any age.

In general, foot drop stems from weakness or paralysis of the muscles that lift the foot. It can have many different causes. Treatments for foot drop vary according to the cause.



What Causes Foot Drop? (1)

"Foot drop is a symptom of an underlying problem, rather than a disease itself. It can be temporary or permanent. The causes of foot drop include:

• Nerve Injury

Most commonly, foot drop is caused by an injury to the peroneal nerve. The peroneal nerve is a branch of the sciatic nerve that wraps from the back of the knee to the front of the shin. Because it sits very close to the surface, it may be damaged easily.

An injury to the peroneal nerve may also be associated with pain or numbness along the shin or the top of the foot.

Some common ways the peroneal nerve is damaged or compressed:

- sports injuries
- diabetes
- hip or knee replacement surgery
- spending long hours sitting cross-legged or squatting
- childbirth
- time spent in a leg cast
- Injury to the nerve roots in the spine may also cause foot drop.

• Brain or Spinal Disorders

Neurological conditions can contribute to foot drop. These include:

- stroke
- multiple sclerosis (MS)
- cerebral palsy
- Charcot-Marie-Tooth disease

• Muscle Disorders

Conditions that cause the muscles to progressively weaken or deteriorate may cause foot drop.

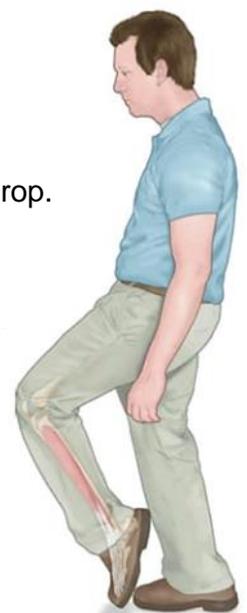
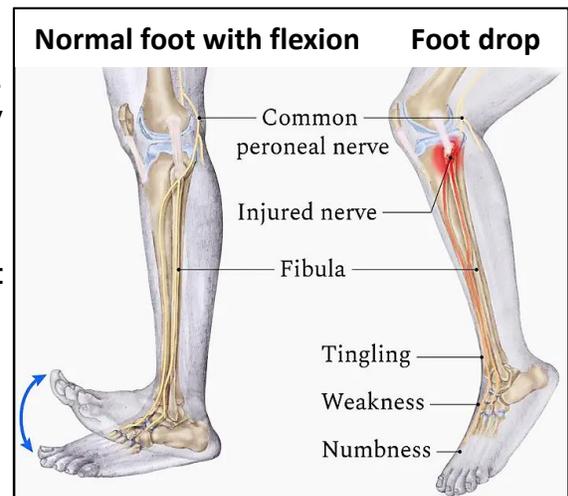
These include:

- muscular dystrophy
- amyotrophic lateral sclerosis (Lou Gehrig's disease)
- Polio

How Do Doctors Treat Foot Drop?

Treatment for foot drop will depend on the cause. Early treatment may improve chances of recovery. The treatments may include:

- lightweight braces
- shoe inserts (orthotics)
- physical therapy
- Surgery
- Lightweight braces are the most common treatment. They're used to support the leg.



continued . . .

How do doctors treat foot drop (continued . . .)

Physical therapy is used to strengthen foot and leg muscles. It may improve a person's ability to walk. In some cases, electronic devices that stimulate the leg nerves during walking may be appropriate.

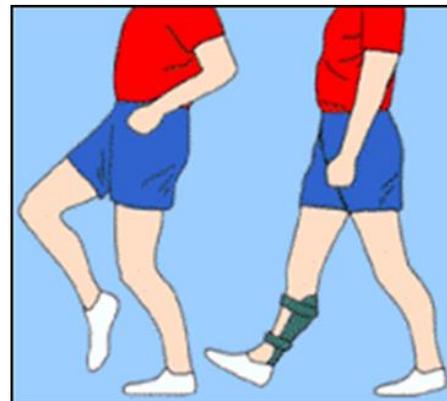
Surgery may be recommended to try to repair or decompress a damaged nerve. In cases where foot drop is permanent, surgery to fuse the foot and ankle joint or to transfer tendons from stronger muscles may help improve gait and stability.” (1)

The term strengthening has a different meaning for polio survivors. Instead, think of maintaining function through body awareness and guided movement.

With a drop foot it is important to have adequate length of the calf muscle that attaches to the Achilles tendon. If the calf muscle is short, it will resist the muscles on the front of the foot and lower leg to lift the ankle.

To determine your ability to lift your toes, foot and ankle -

- Sit straight, with your feet flat on the floor.
- Keeping your heel(s) down, see how much of the front of your foot you can lift. Actively try to tap the front of your foot 2-3 times.
- This will help you be aware of your ability to lift your toes, foot and ankle and give you information to share with your physician and/or PT.
- Your physician may decide to recommend physical therapy.



Due to there being a high risk of falling, wearing an ankle/foot brace is imperative if you have a drop foot. This will allow you to walk more safely, with less effort, and will help keep your posture/gait to be more symmetrical.

- Utilizing a professionally measured cane on the opposite side of the drop foot (or)
- Canes/walker/crutches (if both legs have drop foot) is recommended.

Using a motorized wheelchair or scooter for long distances is often recommended to reduce overuse of your muscles.

A licensed physical therapist can evaluate both your gait and assistive devices. No one wants the issues that come with a drop foot to increase your risk of falling.

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Source: www.webmd.com/a-to-z-guides/foot-drop-causes-symptoms-treatments