

BY GEORGE KRAFT, MD

Can People with MS Improve Their Walking?

When new patients come to see me, they never say, "Please fix my T-cells." They tell me they're tripping and falling and ask if anything can be done. The answer is yes.

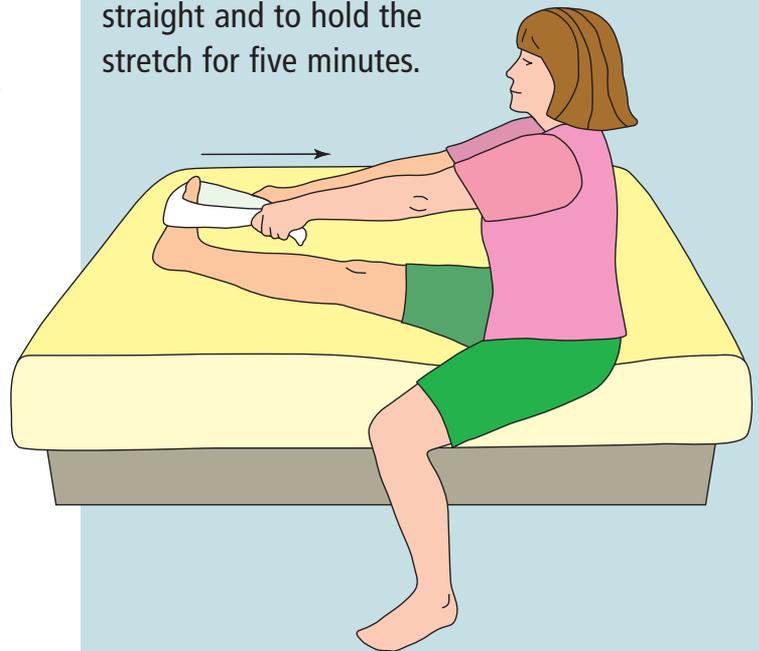
I first need to find out what the problem is: Is it weakness, spasticity (muscle tightness), ataxia (loss of balance), fatigue, impairment of proprioception (the inability to identify where the foot is in space), or a combination? Is it in one limb or in both?

Many people (and some therapists) immediately think "brace" when they see leg weakness. But that may not be the best choice. A person may actually have adequate strength, but spasticity in the ankle region is getting in the way. Tightness related to spasticity can prevent the person from bringing the toes up high enough for a smooth step forward.

A form of MS fatigue may also be involved. The person's legs are sufficiently strong but become fatigued after a few minutes of walking. This

Two daily stretches for heel cords

Stretching the heel cord is something almost everyone with MS should do every day. The key to both exercises is to keep the active leg straight and to hold the stretch for five minutes.



One: Sit on your bed or a steady chair with your back straight. Let one leg hang down. Put a towel around the bottom of your active foot, lift the leg, and pull on the towel with both hands. You should feel a strong stretch but not pain. Hold for five minutes. Repeat on the other side.

muscle fatigue, which is related to altered nerve conduction, may be severe enough to cause tripping or falling.

Spasticity can usually be controlled with medication, with careful attention to dosing. Too much medication reduces spasticity but makes the limbs floppy; too little and the limb is painfully tight. Also, the dose may need to be readjusted temporarily due to factors such as cold weather or infection. Since spasticity can

also change from time to time, the person should be evaluated periodically, and the dose adjusted accordingly.

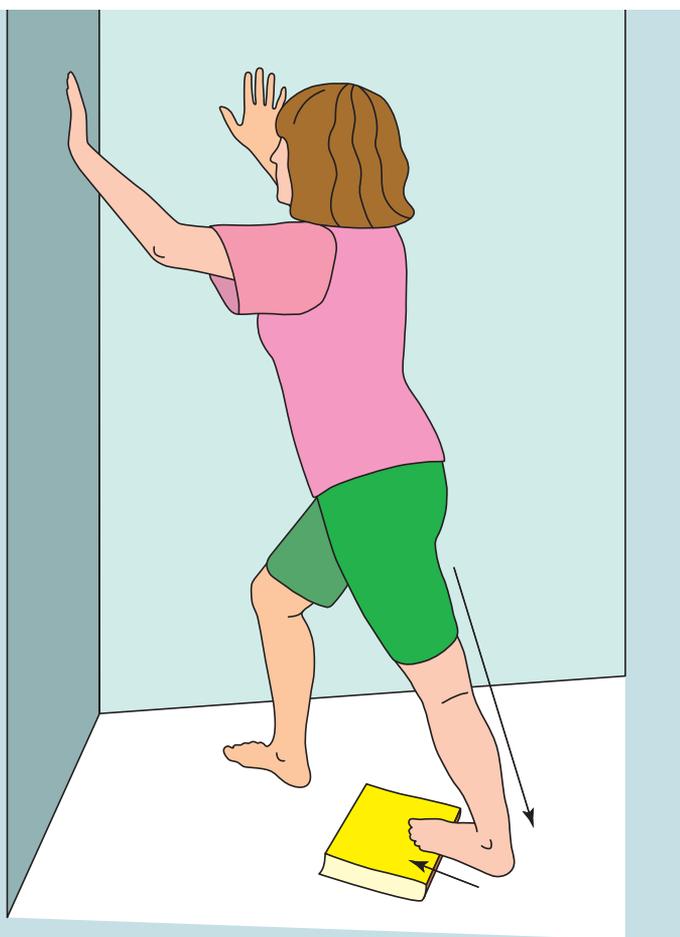
If impaired balance is involved, the person will need his or her base of support broadened by the use of a cane or a walker.

Many physical therapists have learned about techniques for improving walking primarily through work with patients who have had a stroke; but stroke is a fixed condition, unlike MS, which tends to progress. Those whose training is in sports medicine tend to focus on restoring strength and may not see the other MS-related components.

Here's how I usually start. Instead of prescribing braces, I advise wearing shoes that have a slippery toe section. I adjust the anti-spasticity medication and teach the patient to stretch the heel cord (sometimes called the Achilles tendon). Spasticity and lack of use can make the cord so tight that the heel doesn't go down or the toes up. Regular stretching actually remolds the muscle. [See box.]

Weak muscles can be strengthened despite MS muscle fatigue. I recommend focused weight training, because results can be obtained with relatively low general effort. Lifting a leg 10 times with a weight on the large toe will have a positive effect—but you won't break a sweat doing it. I select one or two muscles to strengthen, which can be done with five minutes of daily work.

I will prescribe a brace if strengthening measures aren't enough. Today's braces are unobtrusive, lightweight plastic. The heel cord stretch is important here, too,



DANIELLE MARKS

Two: Place a telephone book near the corner of a room. Holding on to the walls for support, move one leg forward and put the toes of the back foot on the book. Push the heel down to the floor. Keep the back leg straight but relaxed. Hold for five minutes. Repeat on the other side.

because a person has to get the heel down into the brace.

A cane, used properly, is superb for broadening a person's base of support. Canes are simple. There are hundreds of attractive choices, and people generally find them quite acceptable. If they still have a hard time with balance, we need to try a walker. Again, there are walkers in many designs and colors, and they help people walk safely. Finally, if a walker isn't enough, I talk about the ways in which a wheelchair can enable a person to be more mobile. The adjustment may not be easy, but the goal is mobility. A wheelchair isn't a prison. It gets you where you want to go.

People with MS tend to use different devices at different times—and sometimes they need nothing at all. Family, friends, and employers need to learn how variable MS can be.

Help yourself

Call your Society chapter about MS specialists in your area (1-800-FIGHT-MS). In some parts of the country there may not be any available within a reasonable distance. The average general-practice neurologist sees over a thousand people a year, only about 10 of whom have MS. Physical therapists may be similar. This means you and your family members have to become knowledgeable.

■ Take a look at your shoes. The scuffing patterns show if the toe is not coming up high enough. The patterns also show which leg is weaker.

■ Sneaker soles catch and stick on almost anything. But everyone loves

them. Have a shoemaker put low-friction toe caps on your sneakers and on your dress shoes, too.

■ Keep notes about your walking problems. When do you trip? All the time? After walking 10 or more minutes? While shopping or talking, when you aren't concentrating on your gait?

■ Test your stretch. Sit on a chair. Can you raise your leg straight out? When you do, does your foot come up above neutral, or do your toes point down?

Tell your physical therapist about everything you learn from this. If the therapist immediately suggests a brace, ask to try working on function first.

Your Society chapter will have the name of an MS-affiliated clinical facility in your region. It is a good idea to consider evaluation at such a center periodically. Recommendations can be carried out by local care providers.

If your health-care professionals need more information or references to the scientific literature, they are invited to contact the Society's Professional Resource Center at HealthProf_info@nmss.org. ■

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