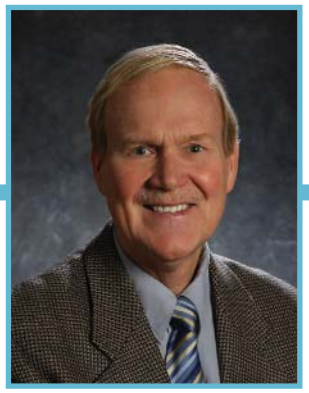
Ask Dr. Maynard



Frederick M. Maynard, MD

Question: *I have a question regarding differential diagnosis specifically utilizing electromyographpy (EMG, a test that measures the electrical activity of muscles at rest and during contraction). I am 63 with a family history of stenosis. I have low back pain, sometimes radiating diagonally to the hip/thigh region and increasing in intensity, leading to sudden inability to rise from sitting to a standing position from my wheelchair.*

An MRI shows L4-5 stenosis. My right leg has always been very weak. The neurologist attempted EMG in the right leg but said there is no electrical response and so there is no way to identify nerve root involvement for possibly repairing the problem. Is there another way to do an EMG on an essentially flaccid leg or another test to diagnose the origin?

A: The potential usefulness of EMG study of a severely long-term paralyzed post-polio leg is indeed limited. There are no other tests to really substitute for it, but I would offer the following thoughts that may be helpful in deciding what is happening with your back and leg (diagnosis) and what to do (treatment).

EMG study could be done on your stronger leg, because spinal stenosis is commonly, although not always, bilateral. If you have had any new loss of sensation in your right foot or leg, this would suggest the stenosis is significant and producing sensory nerve damage.

Your history of radiating pain down the right leg when getting up/changing position/bending suggests a radiculopathy, or pinched nerve problem, in your low back is more the problem than the spinal stenosis, a narrowed central spinal canal space.

You may want to consider a spinal epidural steroid injection. These injections are usually helpful if there is a chronic pinched nerve or spinal stenosis problem causing your symptoms. Even if the problem is not cured, a temporary improvement is helpful and would support the suspected diagnosis. Injections can also be repeated and help avoid surgery, which has significant risks and unpredictable results.

The natural history of people with imaging-demonstrated spinal stenosis is that after one year one-third get better without specific treatment, one-third stay the same and one-third get worse.

Pain going down a leg when making transitional movements, such as standing up, can be a referred pain that originates from an inflammation in the muscles, joints or ligaments of the lower back, pelvis and hips. Evaluation and treatment by a hands-on physical therapist, massage therapist or chiropractor may also be helpful for either resolving the problem or clarifying the true cause.

Question: *I have lower left leg PPS atrophy. Since hernia surgery recently, I haven't been able to walk or bicycle as I regularly used to do. I've sometimes noticed worrisome foot edema that is more pronounced and sustained since the surgery. Other than trying not to sit for too long, cutting back on salt and elevating the leg more, is there anything else I should be thinking about or doing for this?*

A: Hernia surgery could aggravate dependent edema in your polio-affected lower limb in several ways. Sometimes it is the result of salt/water imbalances that follow anesthesia, medications taken before and after surgery and the decreased activity surgery imposes.

Another problem is the swelling in the groin around the hernia repair site because one of the major veins that drains blood from the leg goes through that same area.

In addition, with more sitting and less walking, there is less normal pumping action from leg muscles to cause blood to flow back out of the legs. If any or all of these are the reasons for what you are experiencing, the swelling should largely be gone in the morning after having the leg elevated all night – it can be put on one pillow overnight.

You are doing the right thing by limiting salt, but wrapping the leg and/or elevating it when sitting can also minimize prolonged swelling. You can also wiggle toes and move your ankle muscles up and down while sitting.

There should also be no pain or redness in the leg. The one concern is whether during the surgery you had a new blockage of any veins in your leg. This is known as venous thrombosis. If the leg is red, warm and tender, it may be thrombophlebitis. The former can be silent and resolve with the above simple suggestions. If the latter, and occasionally with the former, there is a possibility that the blocking vein thrombosis (blood clot) can grow, and a piece may break off to cause a pulmonary embolism if a piece of clot travels to the lungs. This can be very serious and occasionally fatal. Generally a blood clot in the leg will be diagnosed by tests, ultrasound and/or scans, and if found, then treated with anti-coagulants.

If you are concerned about having a thrombosis or phlebitis, you should see your doctor immediately or be seen in an urgent care/walk-in clinic. ▲

Send your questions for Dr. Maynard to info@post-polio.org.

To see other questions posed to Dr. Maynard by PHI Members in *Post-Polio Health,* go to www.post-polio.org/edu/askdrmay.html.