Pain, numbness, tingling could be nerve problem

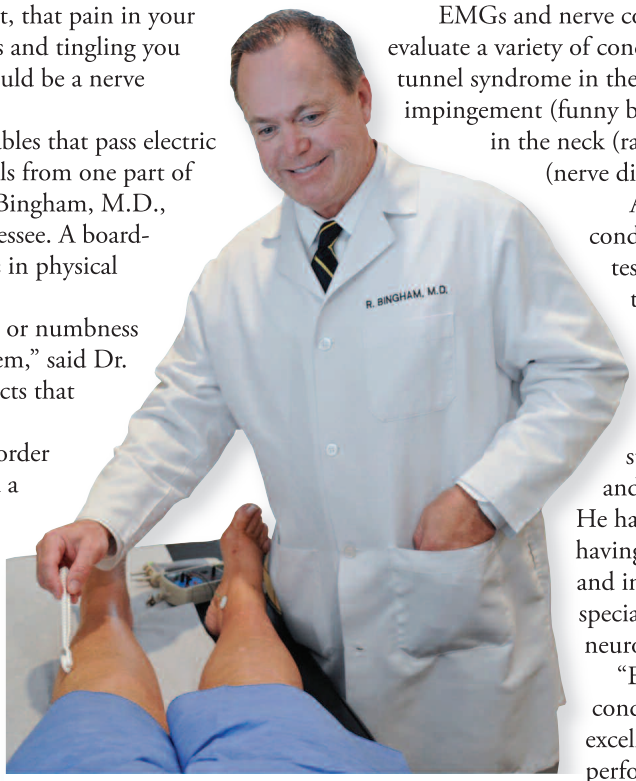
Nerves use electric signals to send instructions throughout body

That weakness in your wrist, that pain in your shoulder or the numbness and tingling you are feeling in your toes could be a nerve problem.

"Your body's nerves are like cables that pass electric current as they send electric signals from one part of your body to another," said Ron Bingham, M.D., founder of EMG Clinics of Tennessee. A board-certified physiatrist, he specializes in physical medicine and rehabilitation.

"Unexplained pain, weakness, or numbness could be a nerve or muscle problem," said Dr. Bingham. "If your provider suspects that you may have a nerve or muscle condition, he or she could likely order an EMG (electromyography) and a nerve conduction study."

When a doctor orders an EMG from another specialist, he or she is ordering a complete nerve and muscle test, which includes the nerve conduction study. A physician should perform the EMG, said Dr. Bingham. The nerve conduction study can be performed by a qualified nurse or technician, but should be interpreted by a supervising physician, he said.



Ron Bingham, M.D., specializes in EMG testing.

Basically, Dr. Bingham says, the EMG test measures the time it takes for a small electric current to go across a measured portion of the nerve. He uses special equipment to stimulate the nerve and test the nerve's electric current.

"The test we perform is similar to one that an electrician would do, except we test the wires in arms and legs to tell which ones are not working. Each nerve is a cable; some fibers go to muscles, some go to skin. With an EMG machine, we can do two things: electrically stimulate the nerve to see how fast electric impulses travel and evaluate the muscles."

Some people worry that the test is painful, he said. "It's a bit uncomfortable, but with today's new equipment and technology, patients say they worried for nothing. We even do this test on children."

EMGs and nerve conduction tests are used to evaluate a variety of conditions, including carpal tunnel syndrome in the wrist, ulnar nerve impingement (funny bone nerve), pinched nerve in the neck (radiculopathy), neuropathy (nerve disease) and nerve injuries.

After Dr. Bingham conducts and interprets the test, he sends the results back to your referring provider, who then discusses with you the proper way to treat the problem.

Dr. Bingham and his staff specialize in EMGs and nerve conduction studies. He has seen the importance of having your EMG performed and interpreted by a qualified specialist, such as a physiatrist or neurologist.

"EMGs and nerve conduction studies are excellent diagnostic tools when performed correctly by skilled physicians and technicians who devote much of their practice to this specialty," he said. "A test done poorly can lead to unnecessary surgery or delay important treatment."

He added that for excellent and reliable results, it is essential that physicians and patients insist that…

- The provider physician has specialized EMG training and is on the premises.
- The technicians are appropriately trained.
- Standard EMG equipment is used.

"Diagnostic testing is like all other areas of medicine," Dr. Bingham said. "It is growing, and the technology is advancing quickly. Finding someone who stays up with these changes is important."

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(Visit AANEM.net for the policy statement from the American Association of Neuromuscular and Electrodiagnostic Medicine.)

Dr. Ron Bingham, who founded EMG clinics of Tennessee in 1989, practices with Dr. Miles Johnson. Both physicians are members of the American Association of Neuromuscular and Electrodiagnostic Medicine. With the main office in Jackson, they also have satellite clinics in Selmer, Savannah, Parsons, Lexington, Paris, Union City, Dyersburg, Bartlett, Southaven (Mississippi) and Fulton (Kentucky). For more information, visit emgclinics.com or call 800.224.1807.