

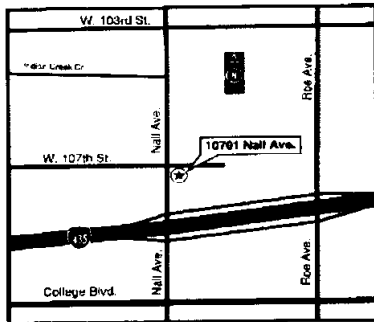
Kansas City Bone & Joint Clinic PA

is now located at:

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Your EMG is scheduled with

Atul T. Patel, M.D.

Date: _____

Time: _____

Facility: _____

Address: _____

Arrive at _____ AM/PM

If you are unable to make
this appointment,
please call the office at:

(913) 381-5225, Ext. 468

Electromyography and Nerve Conduction Velocities

A Patient Guide to EMG Studies

Atul T. Patel, M.D.

Physical Medicine & Rehabilitation

Electrodiagnostic Medicine

Electrodiagnostic medicine is the study of diseases of nerves and muscles. Your doctor has recommended an EMG test to see if your muscles and nerves are working right. You can have problems in only one part of your body or throughout your body. The results of the tests will help your doctor decide what is wrong and how it can be treated.

Why am I being sent to get an EMG test?

You are getting electromyography (EMG) test because you have numbness, tingling, pain, weakness, or muscle cramping. Some of the tests that the EMG doctor may use to diagnose your symptoms are nerve conduction studies (NCSs), needle EMG, and evoked potentials. An EMG records and analyzes the electrical activity in your muscles. It is used to learn more about the functioning of nerves in the arms and legs. When a normal muscle is at rest, it is electrically silent. The doctor will examine you to decide which tests to do.

Needle EMG

During an EMG, small, thin needles are placed in the muscle to record the electrical activity. When the needles are inserted, you may feel some pain and discomfort. The doctor will ask you to relax the muscle and to tense it slightly. The doctor will listen and watch a TV-like screen that broadcasts the electrical signals. You will also be able to hear the signal sounds as you move the muscle. When the needles are removed, you may experience some soreness and bruising, but this will disappear in a few days. There are no long-term side effects.

Nerve conduction studies

NCSs show how well the body's electrical signals are traveling to a nerve. This is done by applying small electrical shocks to the nerve and recording how the nerve works. These shocks cause a quick, mild, tingling feeling. The doctor may test several nerves.

Although you may initially be startled by the suddenness of the stimulation, it is not painful and most people are comfortable during the testing procedure. The shock is similar to one received when you touch a doorknob after walking across carpeting.

How long will these tests take?

The tests usually take 20 to 90 minutes. You can do any of your normal activities like eating, driving, and exercising before the tests. There are no lasting side effects. You can also do your normal activities after the tests.

When will I know the test results?

The EMG doctor will discuss your test results with you or send them to your regular doctor. After the exam, check with the doctor who sent you for the EMG test for the next step in your care.

Who does the testing?

The American Association of Neuromuscular & Electrodiagnostic Medicine's policy is that an appropriately trained doctor should do all needle testing. A trained assistant or technologist under a doctor's supervision can do nerve conduction studies.

What kind of medical training do doctors who do EMGs have?

EMG doctors go to 4 years of medical school then have 3 or 4 more years of training in a residency program. Most work as neurologists or physical medicine and rehabilitation doctors. Medical training helps the doctor decide which tests to perform based on your symptoms. The training teaches doctors what can go wrong with the human body and how to tell the difference between these problems.



The Results from EMG or NCSs need to be used along with your history, symptoms, physical and neurological examinations, and all test results to establish a diagnosis or evaluate how a disease is progressing. Be sure to follow up with your doctor.

How should I prepare for the tests?

Tell the EMG doctor if you are taking aspirin, blood thinners (like Coumadin®), have a pacemaker, lung disease, hemophilia, or are at risk for an infection. It is a good idea to bring a list of all of your medications with you for the doctor performing the test. If you have myasthenia gravis, ask your EMG doctor if you should take any medications before the tests.

The day of the test, take a bath or shower to remove oil from your skin. Do not use body lotion or wear jewelry on the extremity being tested on day of the test. You do not need to restrict your food or fluids. Wear loose-fitting clothing that permits access to the muscles and nerves to be tested, or easily removed if a hospital gown is provided.



IF YOU HAVE ANY QUESTIONS,
THEY WILL BE ANSWERED AT THE
TIME OF YOUR EXAM,
OR
CALL DR. PATEL'S OFFICE AT:

(913) 381-5225, EXTENSION 468