

understanding your emg

Electrodiagnostic medicine studies diseases of the nerves and muscles. The EMG that has been recommended is a test that studies if the patient's muscles and nerves are working correctly. Patient's can have problems with their muscles and nerves in only one part of the body or throughout the body.

A physician examines the patient to decide what test(s) to perform. The results of the tests will help the physician decide what is wrong and how it can be treated. Many pain-related conditions are caused by damage or malfunctioning of the nerves or nerve endings.





who performs the tests (electromyography or nerve conduction studies)?

Dr. Johanna Lange is a board certified physiatrist who specializes in physical medicine and rehabilitation. Dr. Lange is specially trained to perform needle EMG's.

why am I being sent for this test?

Patients are sent for an EMG because they have numbness, tingling, pain, weakness and/or muscle cramping. The physician may also be trying to rule out certain medical conditions. The tests that are performed by Dr. Lange are Nerve Conduction Studies (NCS) and Needle Electromyography (EMG).

nerve conduction studies (NCS)

NCS's show the body's electrical signals that are traveling to a nerve. This is done by applying small electrical shocks to the nerve and recording how the nerve responds. These shocks cause a quick, mild tingling feeling. Several nerves may be tested.

needle EMG

For this portion of the exam, a small thin needle is inserted into several muscles to see if there are any problems. Disposable needles are used for each patient. There may be a small amount of pain where the needle is placed. Dr. Lange examines only the muscles necessary to diagnose the issue. She will look and listen to the electrical signals that travel from the needle to the EMG machine. Dr. Lange then interprets the signals and documents them in her report.

how long do the tests take?

The tests usually take 90-120 minutes. The patient can take their pain medications or other medications as usual. Normal activities like eating, driving and exercising can be performed before and after the test. There are no lasting side effects.

how should I prepare for the test?

Please inform the scheduler and the physician if you are taking aspirin, blood thinners like Coumadin, Warfarin or Plavix, have a Pacemaker, Defibrillator, or have hemophilia. Please take a bath to remove oil on your skin. Do not use body lotion or oil on the day of the test.



when will I know the test results?

Dr. Lange will send the results of the test to the referring physician to review with the patient. After the exam, please follow up with your referring physician for the next step in your treatment and review of the test results.