

EMG/NCS

What is an EMG/NCS and why is it helpful?

EMG stands for Electromyography and NCS stands for Nerve Conduction Study. These two studies are normally done together. These two tests examine the integrity and function of your nerves and muscles.

Who does the testing?

The American Association of Neuromuscular & Electrodiagnostic Medicine's policy is that an appropriately trained doctor should do all needle EMG testing. A trained assistant or technologist under a doctor's supervision can do nerve conduction studies. Our physician is a Board certified neurologist with specialty training in performing EMG and Nerve Conduction Testing.

Why am I being sent to the EMG Lab for tests?

You are being sent to the electromyography (EMG) lab 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. The EMG doctor will examine you to decide which tests to do.

What happens during the procedure?

The test is performed in a lying position. Your leg or arm will be attached with electrodes to a portable machine. For the NCS portion, small electrical stimulation similar to the TENS unit will be discharged to measure the nerve function. For the EMG portion, a small, Teflon coated, sterile needle will be inserted in the muscles. This will feel very much like acupuncture. A new needle is used for each patient. The procedure takes between 30 minutes to an hour. Pain is quite minimal and it is much less than a blood drawn. Most patients describe the pain as a discomfort.

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.

How should I prepare for the tests?

Tell the EMG doctor if you are taking aspirin, blood thinners (like Coumadin®), have a pacemaker, or have hemophilia. Take a bath or shower to remove oil from your skin. Do not use body lotion on the day of the test. If you have myasthenia gravis, ask your EMG doctor if you should take any medications before the test.

What happens after the procedure?

Local discomfort may last a few minutes to about half an hour. You may return to work on the same day.

Risks and complications

There are no known risks with the EMG/NCS. Local discomfort is very brief and transient.

Needle electromyography is an invasive procedure and under certain situations has the potential to be associated with iatrogenic complications, including bleeding, infection, pneumothorax (air introduced in lung), and other local trauma. Similarly, certain precautions are required during nerve conduction studies (NCS) in patients with pacemakers and other similar cardiac devices.

General Pre/Post instructions

Please do not apply any lotion, perfume, or cream to your skins prior to the procedure. There are no precautions after the procedure.

If you still have questions

Please call the clinic where you were seen and make an appointment with Dr. Gupta so that your questions can be answered. It would be best that your questions are answered in person rather than over the phone.