



SOUTHWEST ORTHOPEDIC ASSOCIATES

What is an EMG?

An EMG/NCS (Electromyography/Nerve Conduction Study) is testing of muscles and nerves. The test is performed by a specialist, usually a Physiatrist (PM&R/Rehab doctor) or Neurologist. It is an in-office procedure and does not require hospitalization. On average, an EMG takes anywhere from 30 minutes to 1.5 hours, depending on how much testing needs to be done. It can be done at any time during the day and does not require any special preparation, besides wearing comfortable clothing.

What are some problems for which EMGs are ordered?

An EMG may be ordered to see if you have a pinched nerve in the back or the neck. If you have tingling or numbness in your arms or legs, an EMG may show if you have nerve entrapment along the course of the nerve. Weakness of the muscles or "fatigue" (tiredness) may be indicative of nerve or muscle disease and require an EMG. These are just a few of the many reasons why an EMG may be ordered.

What happens during an EMG?

The test consists of three parts. The first part is like most doctor's office visits, which consist of question asking and physical examination. Next, the doctor will perform the Nerve Conduction Study. In this part, brief electrical stimulations are delivered to your arm or leg in an effort to determine how fast or slowly your nerves are transmitting electrical current (your body's way of sending signals). When this happens, you will feel a tingling sensation that may or may not be uncomfortable. The procedure is repeated until a sufficient number of nerves has been studied. Patients wearing pacemakers or other electrical devices need not worry since the current used will rarely interfere with such devices. During the nerve conduction study, the doctor performing the study will occasionally be pausing to make calculations and take measurements. The third part of the test is the EMG and involves the use of a small needle. The needle is inserted just below the skin to the outer edge of the muscle being tested. Usually 5 to 6 muscles are sampled in one extremity, but occasionally more need to be studied. The needle is inserted into the relaxed muscle and records the muscle activity without the use of electricity. The patient then flexes the muscle and the body's own electrical activity is recorded and analyzed.

What kind of preparations are necessary for an EMG?

You do not need to fast or eat any particular kinds of food before the test. You can drive yourself to and from the test, so you do not need to bring a friend or a relative with you unless you want them along for company. With few exceptions, you may continue taking medication prescribed by your physician as ordered without this interfering with the EMG. If you have any doubts about other medications you are taking, it is best to check with the doctor performing the test to be on the safe side.

How soon will I find out the results?

The results of the test will be shared with you upon completion of the test, along with the doctor's recommended treatment (if necessary). The results will also be faxed to the referring physician, who is usually your primary care physician.

How much will an EMG cost?

Most insurance policies cover EMGs, though frequently the coverage is not 100%. It is best to have your doctor's office find out what kind of coverage you have for an EMG.