Welcome to the Neuromuscular EMG lab

You have been scheduled for a special test, an electromyography exam (EMG). The first part of the procedure is called a nerve conduction study (NCS) and is performed by a technician. The information from the nerve conduction study is reviewed by the physician in charge who will then proceed to perform the second part of the test called a needle EMG. All of the information gathered from these 2 procedures is interpreted by the EMG physician to decide if, indeed, you have a problem with your nerves or muscles that is causing your symptoms.

Your doctor may be able to tell you about some of the results of your nerve studies right after the tests but the implication of those results for your medical issues can only be placed in context by the physician who referred you for the test. If you are a patient of another doctor in our clinic, we may be able to chat with that physician about what the results mean and your next step. Reports are quickly sent to referring doctors so that you can follow up with them.

What to expect: Plan to be in the EMG lab for at least an hour. Wear loose fitting pants, skirts or shorts, and / or short sleeves, if your symptoms are in your legs or feet / arms or hands, respectively. Be prepared to change into a hospital gown, if needed. Socks and shoes are removed for leg studies. Please keep your hands and feet as warm as possible prior to the study. Bathe as usual prior to your appointment, but **omit any lotions, creams, oil or Vaseline** after bathing to improve your comfort during the test and permit the clearest results.

How the testing is performed: You will be asked to lay down on an exam table and will comfortably rest on your back. The test begins with very short (less than 1/1000th of a second), safe bursts of electricity that may feel similar to a rubber band snapping against the surface of one's skin. These bursts stimulate each nerve to be studied. Most people describe the testing as more surprising than painful, and there are no long-term side effects. The electrical message needs to travel from the surface of your skin down to your nerve, so your skin will be scrubbed with alcohol to ensure that salts and oils are removed. Common sites that are stimulated include: the wrists, around the elbow, the ankle and around the knee. The series of pulses increases in intensity from something barely perceptible to something that may feel like an uncomfortable, startling, tingling sensation that is similar to an everyday static electricity shock. It is normal for one's hand or foot to twitch in response to the impulse, and the time it takes for a muscle to respond is recorded. The technician is attempting to capture your nerve's best ability to conduct the electrical message on the EMG machine's screen.

The data that you and the technician collect together will be shared with the EMG clinic physician, who will interpret the results and immediately evaluate whether the second part of the test, needle electromyography, is indicated. When it is, the physician will insert a tiny disposable needle into selected muscles to examine the electrical activity in your muscle fibers. You will hear your own muscles "chatter" and can see electrical signals from your muscles. The needle feels more like a simple pinch, since nothing will be injected. Your EMG physician has been specially trained to interpret what the "muscle language" signifies. He or she may ask you to tighten specific muscles. Essentially, it is a means to directly hear your muscles communicate their side of the story.

Thank you for choosing UF Health Physicians for your care. We look forward to your visit.

Neuromuscular EMG Lab Website (link)

Rev: 03/14/2019, 3/31/2022