Piedmont Neurology, LLC

Stroke · Botox · Headache · Epilepsy · Neuropathy
Spine/Back Disorders · Alzheimer's/Parkinson's Disease

What is an EMG and NERVE CONDUCTION TEST?

EMG/ Nerve Conductions (EMG/ NCV for short) is actually two tests. The first part of the test involves small painless electrical shocks delivered to various nerves in your arms or legs. Nerves are like electrical power lines outside. They actually conduct electrical current. By delivering these shocks to your nerves, the doctor can determine if your nerves are working normally by comparing your nerves to those of thousands of other patients. The second part of the test (EMG) may or may not be necessary depending on the information your doctor needs. The EMG involves placing a small needle into various muscles in order to record electrical activity. No shocks are delivered to the muscle.

Many things can be learned by an EMG/ NCV. Your doctor can evaluate for pinched nerves in your back, nerve injuries from trauma, carpal tunnel syndrome, peripheral neuropathy (burning, tingling, or numbness in the feet or hands) or various other disorders. An EMG can assist with the diagnosis of muscle disease, myasthenia gravis, and ALS (Lou Gehrig's disease).

What you need to know prior to coming to the office:

1. A normal EMG/ NCV takes from 15 minutes up to (rarely) 1 hour.
2. **You should NOT wear lotions or creams on your skin the day of your exam. Be sure to wash well with soap and water prior to the exam**.
3. As a general rule, an EMG/ NCV is not painful. Everyone has a different discomfort level, the test can be terminated at any time by you. You are in complete control.
4. As part of the test, the doctor will make marks on your skin with an ink marker.
5. You may eat prior to the exam.
6. The test will NOT affect the function of a pacemaker or implanted defibrillator (AID).