

EMG (Electromyogram) and NCS (Nerve Conduction Study)

What is an EMG/NCS?

Your doctor has ordered an EMG (electromyogram) and an NCS (nerve conduction study) for you. An EMG/NCS is the electrical study of your nerves and muscles. This study helps your doctor to decide on the cause of your symptoms and plan the best treatment for you. You do not need to prep for the test. If you have any questions, ask your doctor or nurse.

Where is the EMG/NCS lab?

If you are an **inpatient**, we will come to your bedside for the test.

If you are an **outpatient** at University Hospital, stop at registration in the clinic lobby on the 2nd floor to check in. Then, follow Main Street through the H elevator lobby to the J module and check in at the Neurodiagnostics desk.

If you are an **outpatient** at 20 South Park, Neurology Clinic, you will check in on the 1st floor. Then, please come to suite 202 Neurology on the second floor.

What is NCS?

The NCS is the first part of this test. It studies your nerves. We tape small metal discs on your skin based on the nerves that are going to be tested. Then, we use a small electrical current to stimulate the nerve.

We will test several nerves and may test different sites along the nerve. The electrical current causes a tingling, slightly uncomfortable feeling. The testing room may be darkened so we can see the computer monitor better.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 2/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#4303.

What is an EMG?

The EMG is the second part of this test, which studies your muscles. The doctor will insert a small needle into your muscle and record your muscle's electrical activity. We may test several different muscles but each muscle is tested one at a time.

During the test, you will hear crackling sounds coming from the computer speaker. This is the electrical activity from your muscles, which has been changed into sound waves. You do not receive any electrical current for this part of the test. You may have some slight pain during the EMG because we insert the small needle into your muscle. For a day or two after the test, you may feel tender or notice a small bruise on your skin around the testing sites.

The entire EMG/NCS testing can take about 1 to 1½ hours. Please do not use hand or body oils and lotions on the affected area for 24 hours before the test. After the test, we will send the results to the doctor who ordered the test.

Who to Call

If you have more questions, please feel free to call us. For tests at University Hospital please call, (608) 263-7247 or 1-800-323-8942.

For tests at 20 S. Park Medical Center (608) 287-2090 or 1-888-703-2778.