



Patient: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

## EMG/NCS Instructions

The diagnostic studies titled **Electromyography (EMG) and Nerve conduction study (NCS)** are intended to aid the ordering physician in making a diagnosis to better formulate a treatment plan for your symptoms.

**There are two parts to this study:**

1. **NCS:** Consists of the use of a mild electrical current to stimulate the nerves of interest to determine the nerve's functionality.
2. **EMG:** entails the use of a sterile fine needle with a built in electrode at the tip to survey muscles of interest for proper nerve innervation and functionality. Typically, 5-8 Muscles will be tested in each limb.

**Expectations of the patients prior to clinic visit for study:**

1. **Please contact one of our offices to schedule your appointment.**
2. On the day of your exam, please **do not** use any skin products such as lotions, oils or perfumes. As these products, interfere with nerve conduction component of your study leading to suboptimal results.
3. If you are having your **upper extremities** evaluated, please have a short-sleeved shirt on so that the physician can have proper anatomical access to your muscles.
4. If you are having your **lower extremities** evaluated, you will be asked to wear a **gown** in the office. This is necessary, again so that the physician can have proper anatomical access to your muscles.

For any additional information about these diagnostic studies, do not hesitate to contact our **main scheduling center at 248.733.9904 fax 248.733.9906**. Please visit our website for animated video of the study at [www.mi-neurosurgery.com](http://www.mi-neurosurgery.com) under "for our patients" tab and choose the second drop down option, animations.

### Locations

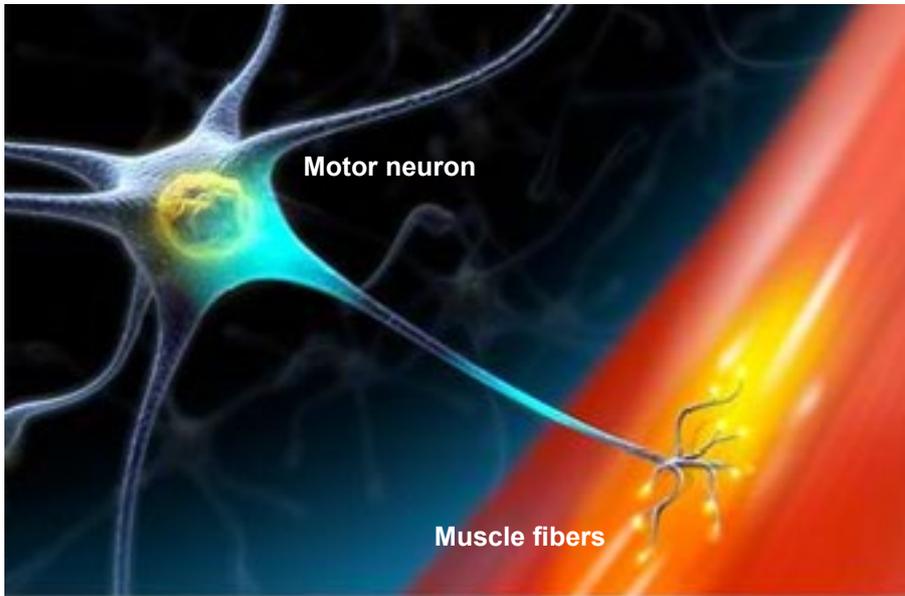
**Wyandotte**  
Down River Medical Associates  
2211 Fort St.  
Wyandotte, MI 48192

**Madison Heights**  
Jagannathan Neurosurgical Inst.  
30775 Stephenson Hwy.  
Madison Heights, MI 48071

**West Branch**  
Mid Michigan Family  
2333 Progress  
West Branch, MI 48661

**Garden City**  
Medical Office Building  
6255 Inkster Rd. Ste. 306  
Garden City, MI. 48135

**ELECTRO|MYOGRAPHY (EMG)**



**Overview**

This outpatient diagnostic test is used to evaluate the health of muscles and the nerves, called motor neurons, which control the muscles. EMG is a valuable diagnostic device for determining the cause of muscle weakness and for identifying neurologic disorders.

**Preparation**

In preparation for the exam, the patient may be asked to wear a hospital gown and is positioned comfortably on an examination table. Electrodes are then placed on the surface of the skin, and thin needle electrodes are carefully inserted through the skin and into the muscles that need to be tested. A topical anesthesia may be used to reduce discomfort. Needles may be placed in a variety of muscles in the body, depending on the patient's symptoms and the type of testing needed.

**Exam**

The electrodes record the electrical activity within the muscles while they are at rest and during contraction. The patient will also be asked to contract and rest the muscles at various intervals. The physician can interpret this data to diagnose nerve or muscle dysfunction.

**End of Procedure**

When the exam is complete, the electrodes are removed and the patient is allowed to go home. The patient may experience minor bruising at the sites where the needles were inserted, but the bruising will fade within a few days.

