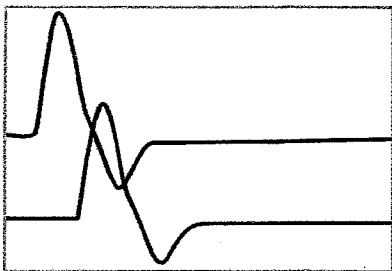


## WHAT ARE THESE TESTS?

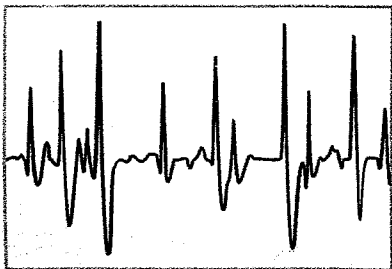
Electromyography (EMG) and nerve conduction studies (NCS) are tests that measure muscle and nerve function. In most cases, both tests are performed. NCS is most often done first.

During NCS, mild electrical currents are applied to the skin on some parts of your body. This is done to see how quickly impulses travel between nerves. EMG assesses muscle function. To do this, a fine needle is placed under your skin into the muscle being tested. This is repeated on other muscles. The needle allows the electrical activity in your muscles to be measured. No electrical currents are applied with the needle.

During each test, wavy lines (**waveforms**) appear on a screen or on paper. These lines show how well your nerves and muscles work. These waveforms help to determine your test results.



Waveforms produced during NCS



An EMG waveform

## TEST TIPS

Prepare for the test as instructed. Be sure to:

- Shower or bathe, but don't use any lotion, oil, or powder.
- Wear loose clothing. But know that you may be asked to put on a gown.
- Take your routine medications, unless advised not to.

Your test is scheduled on:

\_\_\_\_\_

at \_\_\_\_\_ a.m./p.m.

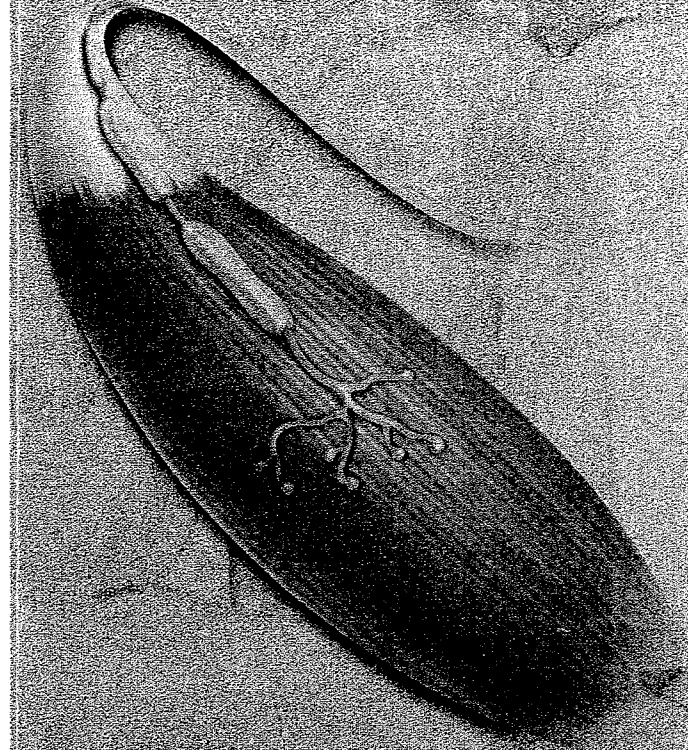
**Please note: Your test may take up to 90 minutes. Due to the nature of the test, persons accompanying you will need to wait in the waiting room.**

**We cannot accommodate unaccompanied children in the waiting area, and ask that you make child care arrangements!**

Any questions, feel free to call us at:

Dr. Kenneth Root, Jr.  
Dr. Jonathan Hodgson  
2730 S. Val Vista Drive,  
Suite 146  
Gilbert, AZ 85296  
(480) 926-0644

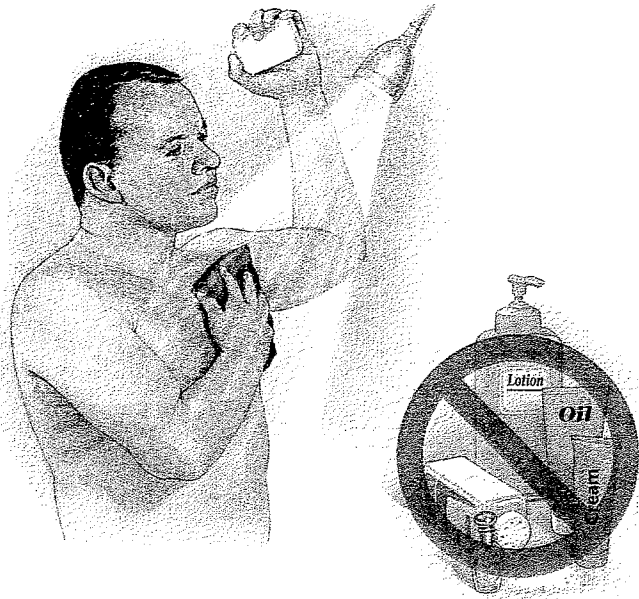
# Electromyography and Nerve Conduction Studies



Testing Your Muscle  
and Nerve Function

## BEFORE YOUR TEST

Prepare for your test as instructed. Shower or bathe, but don't use powder, oil, or lotion. Your skin should be clean and free of excess oil. Wear loose clothes. But know that you may be asked to change into a hospital gown. The entire test will take about 1 hour. Be sure to allow extra time to check in.



*Don't use lotion, oil, or powder after you shower or bathe.*

## LET THE TECHNOLOGIST KNOW

For your safety and for the success of your test, tell the technologist if you:

- Have any bleeding problems
- Take blood thinners (anticoagulants) or other medications, including aspirin
- Have any immune system problems
- Have had neck or back surgery

You may also be asked questions about your overall health.

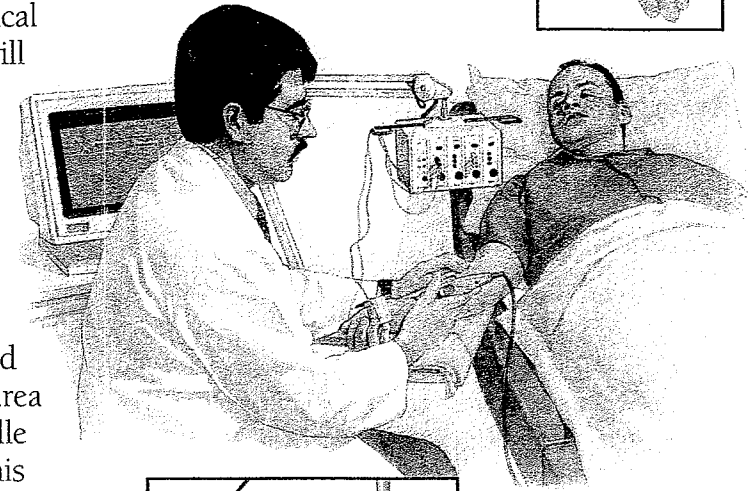
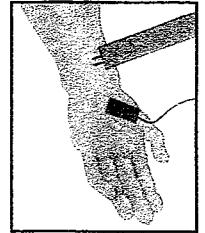
## DURING YOUR TEST

You will be asked to lie on an exam table with a blanket over you. You may have one or both of the following:

### NERVE CONDUCTION STUDY (NCS)

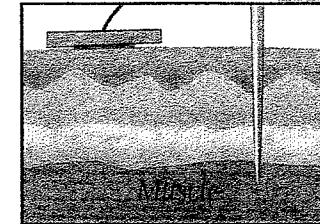
Small metal disks (**electrodes**) will be attached to your skin on the area of your body being tested. This will be done using water-based gel or paste. A doctor or technologist will apply mild electrical currents to your skin. Your muscles will twitch. But the test won't harm you. Currents may again be applied to the same area. Or, the test may continue on other parts of your body.

*During NCS, mild electrical currents are used to test how fast impulses move along your nerves.*



### ELECTROMYOGRAPHY (EMG)

Most of the electrodes will be removed for EMG. The doctor will clean the area being tested with alcohol. A fine needle will be inserted into the muscles in this region. When the needle is inserted, you may feel as if your skin is being pinched. Try to relax and do as instructed.



*During EMG, a fine needle is inserted into your muscle through your skin.*

## AFTER YOUR TEST

Before you leave, all electrodes will be removed. You can then get right back to your normal routine. If you feel tired or have some discomfort, take it easy. If you were told to stop taking any medications for your test, ask when you can start taking them again. Your doctor will let you know when your test results are ready.

