

## **IN-OFFICE DIAGNOSTIC PROCEDURES**

### **Electroencephalogram (EEG)**

Electroencephalography (EEG) is the process of recording brain wave activity. Electrodes are placed on various areas of the head. During the procedure the lights are turned off and one must remain quiet, with eyes closed and refrain from moving or talking. In certain cases, though, the technician may induce hyperventilation or flash strobe-like lights at several flash frequencies. The test is used to diagnose seizure disorders, brainstem disorders, focal lesions, and impaired consciousness.

Neuro Medical Care Associates, PLLC, requests the following of patients to ensure that quality results can be obtained:

- Ensure that your hair is clean and dry, and do not use any hair gels, dressings, or hairspray before the test. Dirty hair or scalp can interfere with electrode sensitivity.
- Eat your normal meals and take your regular medications, unless otherwise instructed by your physician.
- Please no caffeine.

### **EMG/Nerve Conduction Study**

Electromyography (EMG) is the electrical recording of the muscle action potentials.

Nerve conduction study is an electrodiagnostic test of the integrity of the peripheral nerves.

During the test surface electrodes are applied to key areas and then a needle electrode will be inserted into the muscle in order to observe the electric activity.

Neuro Medical Care Associates, PLLC, requests the following of patients to ensure that quality results can be obtained:

**Upper extremity testing:** Please make sure you wear or bring a loose-fitting short sleeved/sleeveless shirt. No lotions, oils, or powers on arms, neck, or upper back. Deodorant is acceptable.

**Lower extremity testing:** Please make sure to wear or bring a pair of loose-fitting shorts. No lotions, oils, or powers on legs or lower back.

### **Somatosensory Evoked Potentials (SSEP)**

Somatosensory evoked potential (SSEP) tests evaluate the nerve pathway from the peripheral nerve through the spine to the somatosensory region of the brain. SSEP's are useful in evaluating spinal cord injuries or disease, neuromuscular disease, and demyelinating diseases such as multiple sclerosis.

During an SSEP test, electrodes are attached to the scalp and at various points along the nerve pathway from an arm or leg to the brain. A small electrical current is applied to the skin overlying a nerve or nerves on the arm or leg. The electrodes record hundreds, sometimes thousands, of electrical responses from the patient's nerve pathway, and these responses are recorded by a special computer for interpretation by a physician.

Neuro Medical Care Associates, PLLC, requests the following of patients to ensure that quality results can be obtained:

- Ensure that your hair is clean and dry, and do not use any hair gels, dressings, or hairspray before the test. Dirty hair or scalp can interfere with electrode sensitivity.
- Eat your normal meals and take your regular medications, unless otherwise instructed by your physician.
- Wear loose-fitting clothing, as electrodes will be applied to your legs, neck, back, hips, and/or knees.