

Evoked Potentials

An Evoked Potential is a test that records the response of the nervous system to sensory stimulation. There are Evoked Potentials for different senses: Visual (VEP), Brainstem Auditory (BAEP), and Somatosensory (SSEP). Evoked Potentials provide valuable information for the diagnosis of problems related to blurred vision, tingling, Guillain-Barré, Multiple Sclerosis, and other neurological disorders.

An Evoked Potential is performed by the technologist, usually in the Neurodiagnostic Laboratory. The overall length of time for each test is about an hour. Recovery should be immediate.

About Evoked Potential

- An Evoked Potential is a test that records the response of the nervous system to sensory stimulation.
- The overall length of time for each test is about an hour.

VISUAL EVOKED POTENTIAL (VEP)

During a Visual Evoked Potential, 6 small electrodes are applied to the scalp with a conductive cream. Each eye is then alternately stimulated while the patient focuses on a dot in the middle of a checkerboard screen. There is no discomfort during the stimulation.

Note: The Visual Evoked Potential cannot be performed within 12 hours after use of pupillodilator drops, even if pupilloconstrictor drops were subsequently used.

SOMATOSENSORY EVOKED POTENTIAL (SSEP)

During a Somatosensory Evoked Potential (SSEP), 3 or 4 small silver electrodes are applied to the scalp using a conductive cream. When the upper body is tested, 2 more electrodes are applied to the base of the neck. When the lower body is tested, 2 electrodes are placed behind the knee and 2 on the back. A small amount of continuous electrical stimulation is applied to the electrodes, lasting about 5 minutes, and rarely causing any discomfort.

BRAINSTEM AUDITORY EVOKED POTENTIAL (BAEP)

During a Brainstem Auditory Evoked Potential (BAEP), 2 small silver electrodes are applied to the scalp and 1 electrode is applied behind each ear using a conductive cream. Each ear is alternately tested with a clicking sound for the patient to hear. There is no discomfort during the stimulation.

Your testing is scheduled at Huntsville Hospital for _____ at _____ am/pm.
Please go to **Admitting** in the lobby. If you need to cancel or reschedule your testing appointment, please call **Central Scheduling** at 256-265-9999.

For more information on Evoked Potentials, call HHNA at 256-265-2695.



Huntsville Hospital Neurological Associates

Blackwell Medical Tower
201 Sivley Road, Suite 200
Huntsville, Alabama 35801

Nerve Conduction Studies

A Nerve Conduction Study is the recording of the muscular response to electrical stimulation. It shows how fast the nerves carry impulses and how well the muscle responds to the impulse. It is a valuable diagnostic tool in the evaluation of neuromuscular diseases.

A Nerve Conduction Study is performed by the technologist either at the bedside, in the Neurodiagnostic Laboratory, or in the office.

There is no prior patient preparation for the test. During the test, two small silver electrodes are taped to the skin above the muscle to be tested. A small but increasing electrical stimulation is briefly and repeatedly sent to the muscle. It may cause mild discomfort.

The test lasts for about 5-10 minutes for each muscle tested. Not all muscles are tested; the physician specifies which muscles when ordering the test. The overall length of the Nerve Conduction Study will depend upon which and how many muscles are tested. Recovery should be immediate.

**** DO NOT WEAR LOTION ON THE EXTREMITIES TO BE TESTED****

About Nerve Conduction Study

- A Nerve Conduction Study is the recording of the muscular response to electrical stimulation. It is used in the evaluation of neuromuscular diseases.
- The test lasts for about 5-10 minutes for each nerve tested.

**For more information call
HHNA at 256-265-2695.**

Electromyogram

An EMG, or electromyogram, is a recording of the electrical activity of muscle fibers and is a valuable diagnostic tool in the evaluation of neuromuscular disease.

An EMG is performed by a neurologist, either at the bedside, in the Neurodiagnostic Laboratory, or in the clinic setting.

There is no prior patient preparation. During the test, the patient is asked to contract and relax each muscle as it is evaluated. Not all muscles are tested; the neurologist selects the appropriate muscles to be tested. The patient may have some discomfort during the test while the small needle electrode is inserted into each muscle and the muscle is contracted. Muscles are tested one at a time and usually requires only one needle stick per muscle.

The overall length of the EMG recording will be 15 minutes, depending on the number of muscles tested. Recovery should be immediate.

NOTE: An EMG to test the paraspinal muscles cannot be done for at least 12-24 hours after a myelogram.

ABOUT EMG

- An EMG, or electromyogram, is a recording of the electrical activity of muscle fibers and is used in the evaluation of neuromuscular disease.
- The overall length of the EMG recording will be about 15 minutes, depending on the number of muscles tested.

Your appointment is scheduled at HHNA, 201 Sivley Rd., Suite 200. (Blackwell Medical Tower) on

_____ at _____ am/pm.

If you need to reschedule or cancel your appointment, please call 256-265-2695. Please allow 24 hrs for rescheduling to avoid charges.



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