Electroencephalogram (EEG)

Electroencephalography (EEG) is the measurement of electrical activity produced by the brain as recorded from electrodes placed on the scalp.

An EEG is used to help diagnose the presence and type of seizure disorders, confusion, head injuries, brain tumors, infections, degenerative diseases, and metabolic disturbances that affect the brain. It is also used to evaluate sleep disorders and to investigate periods of unconsciousness.

Preparation:

1. Please wash your hair the night before the test. No oils, sprays, or lotion should be used on your hair.
2. Please avoid all foods/drinks containing caffeine for 8 hours before the test.
3. It may be necessary to sleep during the test, so you may be asked to reduce your sleep time the night before.

Procedure:

1. This procedure is performed by an EEG technician and typically lasts 20-40 minutes.
2. You may be positioned on your back, on a table, or in a reclining chair.
3. The technician will apply between 16 and 25 flat metal discs (electrodes) in different positions on your scalp.
4. The discs are held in place with a sticky paste. The electrodes are connected by wires to an amplifier and the recording machine which converts the electrical signals into a series of wavy lines which are drawn onto a moving piece of graph paper.

How It Feels:

This procedure is painless

Ambulatory EEG:

Standard EEG electrodes are placed on the scalp, but a smaller number than with a routine recording. The wires from these electrodes are plugged into a small portable relay box and the EEG signals are recorded on a standard cassette tape or disc in a battery-operated recorder worn around the chest or waist.

Once the ambulatory EEG recorder has been fitted and tested, the person goes home and carries on with normal daily activities, returning about 24 hours later to have the device removed.
The ambulatory EEG can be beneficial because it records a patient’s brainwaves during their normal daily activities. This procedure lasts longer than a typical EEG and can detect any abnormalities that may not occur during a 30 minute test in a doctor’s office.

The patient will be asked to keep a journal of their activities during the test, as well as document any abnormalities or attacks that may occur.

**How It Feels:**

This procedure is painless.