An electroencephalogram (EEG) is a test that measures and records the electrical activity of your brain. Electrodes are attached to your head and hooked by wires to a computer. The computer records your brain's electrical activity as wavy lines on the computer screen or on paper.

**Why is this test done?**

An EEG is the most useful and important test in making a diagnosis of epilepsy and seeing what types of seizures are happening.

This test also is used to check brain activity in sleep disorders and to see why someone might have passed out (lost consciousness).
How can you prepare for the test?

- Tell your doctor if you are taking any medicines. Your doctor may ask you to stop taking certain medicines before the test. These medicines include sedatives and tranquilizers, muscle relaxants, sleeping aids, or medicines used to treat seizures.
- Do not eat or drink foods that contain caffeine (such as coffee, tea, cola, and chocolate) for 8 hours before the test.
- Shampoo your hair and rinse with clear water the evening before or the morning of the test. Do not put any hair conditioner or oil on after shampooing.
- Your doctor may ask you not to sleep the night before the test or to sleep for only about 4 or 5 hours. This is because some types of the brain’s electrical activity can’t be found unless you are asleep. If you know that you are going to have a sleep-deprived EEG, plan to have someone drive you to and from the test.

What happens during the test?

- You will lie on your back on a bed or table or relax in a chair with your eyes closed.
- A technologist will attach 16 to 25 flat metal discs (electrodes) to different places on your head. A cap with fixed electrodes may be used instead of individual electrodes.
- Lie still with your eyes closed during the recording, and do not talk to the technologist unless you need to.
- The technologist may ask you to:
  - Breathe deeply and rapidly (hyperventilate).
  - Look at a bright, flashing light called a strobe.
  - Go to sleep. If you cannot fall asleep, you may be given medicine to help you fall asleep.

What else should you know about the test?

- There is no pain. No electrical current goes through your body.
- If you have a seizure disorder such as epilepsy, the flashing lights or hyperventilation may cause a seizure. The technologist is trained to take care of you if this happens.
- If electrodes are placed in your nose, they may cause a tickling feeling and, rarely, some soreness or a small amount of bleeding for 1 to 2 days after the test.
How long does the test take?

• The test will take about 1 to 2 hours.

What happens after the test?

• You will probably be able to go home right away. But if you had a sleep-deprived EEG, have someone drive you home.
• You can go back to your usual activities right away.

When should you call for help?

Watch closely for changes in your health, and be sure to contact your doctor if:

• You have any problems that you think may be from the test.
• You have any questions about the test or have not received your results.

Watch closely for changes in your health, and be sure to contact your doctor if you have any problems.

Follow-up care is a key part of your treatment and safety. Be sure to make and go to all appointments, and call your doctor if you are having problems. It's also a good idea to keep a list of the medicines you take. Ask your doctor when you can expect to have your test results.

Where can you learn more?

Go to http://www.kp.org

Enter F196 in the search box to learn more about "Electroencephalogram (EEG): About This Test".

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