

Procedures/Diagnostic Tests

EEG (electroencephalogram)

You are scheduled for an EEG, also known as an electroencephalogram or brain wave test. The brain makes electrical signals with certain rhythms and shapes. These signals can be analyzed to help make a diagnosis.

If you or your child has had problems or concerns about EEGs in the past, please inform the technician who will do the study. It may be necessary to sedate a patient if he or she is unable to cooperate during the procedure. Patients will be fully informed if sedation is needed.

Preparation

- You may wash your hair if you so desire, but do not use hair spray or oily scalp products 24 hours before the test. If possible, eat a meal or light snack within 4 hours of your EEG. Avoid caffeinated drinks.
- Sometimes, the EEG gives better results when the patient has had less than the usual amount of sleep. Your doctor may ask you to stay awake for all or part of the night before your EEG.
- You will be asked to go to the EEG laboratory at a specific time. Once there, you may be asked to wait before the test begins. Please be patient until you are called.

Procedure

- The technician will either measure your scalp and mark the spots where small discs will be placed, or fit you with a special cap containing these discs.
- Your scalp will be rubbed with a mild, scratchy cleanser that may cause mild discomfort for a short while.
- The discs will be attached to your body with a cream or gel. The technician may secure the discs to your skin with an adhesive.
- Your heart may be monitored during the procedure.
- You will lie on a bed or in a comfortable chair so that a relaxed recording can be done.
- From time to time, the technician may ask you to open and close your eyes and to do a breathing exercise. A special light may be flashed over your eyes.
- The EEG takes about 1 1/2 hours.

After the procedure

- The technician will remove the gel with water. The adhesive will be removed with a special cleanser. Shampooing will rid your hair of any other material.
- Some patients are mildly sensitive to the gel or cream, or get irritation from the rubbing of the scalp. There are no other side effects or precautions needed after the test.

If you have questions about the procedure, please ask. Your nurse and doctor are ready to assist you at all times.

Special instructions

This information is prepared specifically for persons taking part in clinical research at the National Institutes of Health Clinical Center and may not apply to patients elsewhere. If you have questions about the information presented here, talk to a member of your health care team.

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