

Patient Education TESTS AND PROCEDURES

Video-EEG Monitoring

About the Test

Video-EEG (electroencephalogram) monitoring is done to help:

- Find out if you have epilepsy.
- Locate area of the brain where the seizures are coming from.
- Decide which treatment options are best for you.

The EEG portion of the test looks at the electrical activity of the brain. The brain and the connected network of nerves are called the central nervous system (CNS). The brain sends messages to the body by way of these nerve pathways. The messages take the form of electrical activity. During a seizure this electrical activity "short circuits." How you react depends on the area of the brain where the short circuit occurs.

A video recording shows how your body responds during a seizure. To obtain the detailed information that will help guide your care, both tests are done together. It:

- Requires a hospital stay.
- Can last from about 2 days to 10 days (varies for each patient), but takes on average 3–4 days.
- Is done in a private room on the Neuroscience unit using special monitoring devices.

Please review this brochure. It will tell you what to expect during your hospital stay and the test itself. If you have any questions, please contact the Epilepsy Nurse Coordinator at 312-695-0632

If you have any questions, please ask your doctor or nurse.

Getting Ready

Day of Your Exam

Be sure to shower and wash your hair on the day of your hospital admission. **Do not use any oils, sprays or conditioners on your hair.** (You will not be able to shower or wash your hair during the exam.) Avoid food with caffeine for 8 hours before coming to the hospital. But you may have your regular diet and take your routine medicines (unless told otherwise).

What to Bring

- Photo ID.
- Insurance card.
- Medicare card (for Medicare patients).
- List of allergies and current medicines.
- Seizure log (if you are using one).
- Containers for contact lenses, glasses, or dentures.
- Toiletries and other personal items.
- Address of all doctors involved in your care. (neurologist, primary care, neurosurgeon, and if applicable obstetrician/gynecologist, psychiatrist and any other doctor you would like to keep informed of your seizure care).

Please leave all valuables (jewelry, credit cards, money) at home.

Arrival

Come to the Feinberg Pavilion, 251 East Huron Street. Check-in at the Information Desk on the 1st floor. Parking is available for patients and visitors in the garage at 222 E. Huron, across from the Feinberg and Galter Pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter Pavilions, and the 1st floor of Prentice (including the Prentice 24-hour desk near the Superior St. entrance).

When you first arrive at the Registration Desk, your information is checked and updated as needed. You will be directed to the waiting area until called by a patient liaison.

The Neuroscience Unit

The patient liaison will escort you to your room and will ask for any added information needed to complete your records.

You will note that:

- The bed is higher and more narrow than the one in your home. There are padded side rails to protect you in case you have a seizure. (Please do not try to raise or lower the rails yourself. Each bed has a call button to push when you need a nurse.)
- A video camera is on the wall facing the bed.

A doctor will do a physical exam and ask you about your health history. Describe your symptoms or seizures to the doctor:

- What happens during the seizure.
- How you feel before any event/seizure.
- What activities seem to "trigger" a seizure.

If you have a seizure log, be sure to show it to the doctor.

Also tell your doctor what medicines you are taking, including any herbals or diet supplements. Do not take medicines from home. Needed medicines are given and explained to you by the nurse.

Note: Your medicines may be adjusted during your stay to increase the chance of having a seizure.

The nurse will also review your health history and tell you more about what to expect during your stay. Tell your nurse about your

- Allergies.
- Diet restrictions.
- Assistive devices (cane, hearing aid, etc.).

Before the test begins, the nurse will place an IV (into the vein) line in to your arm or hand. The IV is used to be able to give you medication quickly during a seizure if needed.

After you have changed into a patient gown, the EEG tech will explain the devices used during the test. This includes the use of 13 to 25 small metal pads (electrodes) placed on your head. The pads can be applied in one of 3 ways. The EEG tech will explain which method will be used.

Once placed, each electrode is attached by a thin wire to a small monitor worn by you. The monitor has:

- A pouch with shoulder strap.
- An "event" button (to be pushed when a seizure occurs).

Another set of long wires connects the monitor to an EEG/video computer in your room. This allows your brain activity to be recorded so the images can be seen and saved for later review. To help keep the electrodes secure, a dressing is wrapped over your head.

The tech will give you a diary to record symptoms and explain:

- How to use the diary.
- When to use the "event" button.
- Normal beeps and buzzes the machine makes.

During the Test

You may rest in bed or sit in the chair. Your activity is limited by the wires connected to the computer. You must stay in **full view** of the camera at all times (except when in the bathroom). If you need to turn away from the camera, talk with your nurse or tech so that the camera can be moved into proper position.

To help assure accurate test results, please make sure that you or your visitors do not touch the:

- Dressing on your head.
- Electrodes.
- Wires.
- Keyboard on the EEG/Video monitor.

If the dressing feels loose or shifts, tell the nurse. The EEG tech will adjust if needed. It is important to:

- Always ask for help when getting out of bed or going to the bathroom. This will help keep you safe. It will also allow us to monitor you while you're not in the view of the camera.
- Wear the monitor at all times; keep it away from water.
- Have the door to your room **open**.
- Push the event button as soon as you note any symptoms.
- Use your diary as instructed, noting:
 - Symptoms.
 - What you were doing when the symptoms began.

Remind visitors not to stand in front of the camera. It is also helpful to tell them that you may have a seizure. Should that occur and staff are not present, visitors should:

- Stay calm.
- Push the event button.
- Push the Nurse call button.
- Remove any objects around you that may be dangerous.

The EEG tech and the nurse will be at the bedside if you have a seizure. They will be keeping you safe during this time.

During each seizure, you may be asked to answer questions and do some motor tasks (e.g., touch your nose with your finger).

Each day the doctor will update you about the EEG test results. If needed, other tests may be done. Your doctor will talk with you about these tests before they are done.

Going Home

Before you go home, the electrodes are removed. The doctor and nurse will review:

- Activity guidelines.
- When and how to call your doctor for any problems.
- Follow-up doctor visits.

You will be given a list of the medicines to take at home. Written medicine guidelines are available. Be sure to ask your nurse for a copy. It is important to know each medicine's:

- Name.
- Purpose/action.
- How and when to take.
- Side effects to report to the doctor.
- Special guidelines (e.g., use with other medicines, foods, etc.).

Be sure you understand your discharge instructions. Your nurse or your doctor will answer any questions you or your family may have.

A final report will be sent to your doctor after your EEG monitoring is done.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

Para asistencia en español, por favor llamar a el departamento de representantes para pacientes al 312-926-3112.

Northwestern Memorial is an equal opportunity employer that welcomes, respects and serves with dignity all people and does not discriminate, including in hiring, or employment, or admission, or access to, or treatment in its programs or activities on the basis of race, color, gender, national origin, religion, disability, handicap, age, Vietnam or other veteran status, sexual orientation or any other status protected by relevant law. To arrange for TDD/TTY, auxiliary aids and foreign language interpretation services, call the Patient Representative department at 312-926-3112, TDD number 312-926-6363. Issues related to the Rehabilitation Act of 1973 should be directed to the director of Employee Relations or designee at 312-926-7297.