

Northwestern Memorial Hospital

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 which area of the brain 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 sends messages to the body in the form of electrical activity through nerve pathways. A seizure occurs when an abnormal burst of energy interrupts the normal electrical activity in the brain. How you react depends on the area of the brain where the seizure 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. This testing:

- Requires a hospital stay.
- Can last from about 2 to 6 days (varies for each patient), but takes on average 3 to 5 days.
- Is done in a private room on the Epilepsy Monitoring 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 Administrative Coordinator at 312.926.1673.

Getting Ready

An epilepsy clinic nurse will call you a few days before your admission to get updates and provide you with further instructions. You may be asked to hold the medicine you take for seizures, however continue to take all other prescribed medications.

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.** Any hair weaves should be removed before you come to the hospital. 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).

If you have any questions, please contact the Epilepsy Administrative Coordinator at 312.926.1673.

What to Bring

- Photo ID.
- Insurance card.
- Medicare card (for Medicare patients).
- List of allergies and current medicines. Please also bring the bottles of seizure medication as some seizure medications are not available in the hospital.
- Seizure log (if you are using one).
- Containers for contact lenses, glasses, or dentures.
- Fax numbers 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. The following toiletries are available to you at the hospital: soap, basin, Kleenex[®], baby shampoo, lotion, toothbrush, toothpaste and a comb. You may bring any additional items that will make your stay with us more comfortable. If you have long hair, a brush or wide-tooth comb may be helpful to detangle your hair when your electrodes are removed. Hand sanitizer will be provided upon request.

Any clothing you bring from home must be able to **open completely** from the front (for example, a button down shirt or pajama top). **Do not** bring any clothing items you must pull over your head (example: sweatshirts, t-shirts). Please bring only short-sleeved tops, as you must have an IV catheter placed. Hospital gowns and pajama bottoms will be provided to you if you prefer not to wear your own clothing from home, or in the event that a certain test requires you to wear hospital clothing.

Arrival

Come to the 2nd floor Galter Pavilion Admitting Department (675 North Saint Clair Street). Parking is available for patients and visitors in the garage at 222 East Huron Street, 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 Street 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.

Epilepsy Monitoring 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. The nurse will give you any medicine that is ordered by the doctor and explain the medicine to you.

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.)
- For females of childbearing age, please tell us if there is any chance that you might be pregnant.

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 which will record any seizure activity.

A 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.

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

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.
- Please do not chew gum or suck on hard candy. This is for your safety in the event of a seizure. This can also interfere with the EEG tracing.
- You may be fitted with a head dressing to cover the electrodes. Please do not touch or adjust the electrodes or dressing. If it feels loose or changed in any way, tell the nurse.
- A cable will connect the electrodes on your head to our recording equipment. You
 will carry this in a pouch. Wear the monitor at all times.
- You will not be able to take a shower or wash your hair while being monitored. You will be able to wash up at the sink in the bathroom. Keep the monitor dry.
- Please do not pick, scratch, pull or play with the wires around your head or body. This can make the tracing hard to read.
- Please do not touch any buttons or use the keyboard on the EEG/Video monitor. This may cause data to be lost.
- Push the event button as soon as you note any symptoms.

Let your visitors know that we are recording audio and video and to please not 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 and state your symptoms to the camera, if possible. Avoid blocking the camera view.
- 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 (such as touch your nose with your finger).

Each day the doctor will update you about the EEG test results. Your medications may be adjusted during your stay to increase the chances of you having a seizure. If needed, other tests may be done. Your doctor will talk with you about these tests before they are done.

Activities

You may bring any item from home that will help pass the time. Cards, games, books, needlework, etc. are some good choices. Cable TV, WiFi and local phones are free in each room.

Laptop computers may be used as long as they do not interfere with EEG monitoring. Please bring your battery charger since you may not be able to have the equipment plugged in while using it. Northwestern Memorial is WiFi connected. Mobile phones are permitted as long as they do not interfere with EEG monitoring.

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, such as use with other medicines and foods.

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.

Northwestern Medicine-Health Information Resources

For more information, contact Northwestern Memorial Hospital's Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. You may also visit the HLC on the 3rd floor, Galter Pavilion at 251 E. Huron St., Chicago, IL. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.

Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312.926.3112.

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital's Patient Representatives Department at 312.926.3112, TDD/TTY 312.926.6363 or the Northwestern Medical Group Patient Representatives Department at 312.695.1100, TDD/TTY 312.926.6363.

Developed by: NMH Northwestern Medicine Comprehensive Epilepsy Center, Neurological Testing Center, with Neurology Nursing