

What is long-term video EEG monitoring (LTM)?

A long-term video monitoring EEG (electroencephalogram) is a study that looks at your child's brain waves over a long period of time. For this test, your child is admitted to the hospital, and depending on the goals of the study, may stay one night or more if needed. This helps the provider get a more complete picture of your child's condition.

- You will receive a call from the LTM scheduler to schedule this test. LTM admissions are scheduled Monday-Friday at specific times (10 am or 1 pm). There are some spots for admission on Saturday and Sunday; if you are scheduled for a weekend admission, you will receive a phone call from the admitting office when the room is ready for you to arrive. Please be ready to come to the hospital as soon as you receive the phone call and try to **arrive no later than 3:30pm**.

What happens during an LTM?

The process for getting hooked up for an LTM is very similar to an outpatient EEG, with a few differences.

- A specially trained EEG technologist will apply the electrodes and the EEG equipment that is required. The hook up will take about 60 minutes from start to finish. Your child's hair does not need to be cut or shaved.
- Your child will be asked to lie down on a stretcher or bed.
- Your child's head and body need to be completely still when the electrodes are placed. You may be asked to help your child stay still so the process can go as quickly and easily as possible. If your child is 4 years old or younger and still moves too much, their body may be wrapped snugly so that the electrode application can be completed.
- Your child's head will be measured with a measuring tape.
- The EEG technologist will mark 30 locations on your child's head with a grease pen.
- The EEG technologist will rub a sandy cleanser on the places where the electrodes will be placed before putting them on, which helps them stay in place.
- Small circular-shaped electrodes will be placed on your child's scalp.
- Your child's head will be wrapped in gauze.
- The electrodes are connected to a small EEG computer machine that is carried in a small backpack.
- Then you will go into a hospital room where the special monitoring equipment will be used. At times you may need to wait in the EEG lab until a hospital bed is available.
- The EEG staff will explain the EEG push button, video camera equipment, and your important role in keeping a record of your child's seizure episodes.
- You will be given an Event Log to write down the time and details of events when they occur. This information will help the doctor read and interpret the computer data to make an accurate report.

How do I prepare for the test?

- Wash your child's hair the night before or the morning of the admission. Do not use any styling products (they prevent the electrodes from sticking).
- Pack button up clothing if your child does not want to wear a hospital gown.
- Plan extra time for arrival at the hospital. Allow time for parking.
- You can either chose to valet park (located at Mott Hospital main entrance) or park in parking structure P4 (across the street from Mott Hospital).

- You will check in at the 12th floor EEG desk (use hospital elevator 7) and will be asked to wait in the waiting room until the EEG tech takes your child to the EEG lab room.
- Once your child has been hooked up, you may have to wait in the EEG lab room until your child's hospital room is ready.
- **Someone the age of 18 or older must be present for the entire hospital stay even if your child is over the age of 18.**

What should I bring to the hospital?

- Comfortable clothes that include shirts or pajamas that zip or button up the front. Your child will not be able to take off clothes over their head once connected to the EEG equipment.
- Items that will keep your child occupied such as books, games, crafts, or homework. Your child will be required to remain in front of the video camera during the monitoring period.
- Bring all medications, including your child's seizure rescue medication (if prescribed).
- Feel free to bring favorite snacks and drinks (each hospital room has a small refrigerator). Your child will be able to order meals from our menu as well.

What will I do during the LTM?

While your child is being monitored, you will stay in their room and watch them closely. If they have an event, you will push the event button. For this reason, you, or another caregiver familiar with your child's events must stay in the room at all times.

We also ask that you fill out the event log when you push the button and say out loud why you pushed it. You can see your child much better than the video camera does. Also say whether or not this event was typical of the events that have been occurring at home or school. When the event button is pushed, the doctors will watch the video and listen to the audio recording during that time. If you forget to push the button or cannot get to it immediately, look at the clock, push the button when you can, and say out loud what you saw, what time it occurred, and what you and your child were doing at the time. (For example, "At 1:35, he was eating pudding and just stopped and stared.")

Please do not push the event button because of change in the EEG tracings on the computer screen or because of automated seizure detection text that may show up on the screen. It's not very accurate and is best ignored.

What else do I need to know?

- During your child's admission, a team of doctors, nurse practitioners, nurses, and EEG technologists, will care for your child. The team will do daily rounds to make sure your child's hospital stay is going well and to answer any questions or address any concerns you have.
- While in the hospital, your child may need other tests, like blood work. We will explain these tests to you and your child if they are needed.

What happens when the test is over?

- The electrodes are removed with an adhesive removing oil.
- Your child will need a bath or shower to clean their hair.

When do we get the results?

It can take up to 5 business days from when you go home to get the final results of the study. The amount of time it takes depends on the length of the test. Preliminary results will be provided prior to hospital discharge.

If you have further questions or need to cancel or reschedule the study prior to your child's test date, please call the EEG laboratory at 734-232-9271 option #2, Monday through Friday, 8am-5pm.