Epilepsy Monitoring Unit

The epilepsy monitoring unit (EMU) is a specialized unit at medical institutions or epilepsy centers designated to observe, evaluate, and diagnose your seizures using continuous electroencephalography (EEG) with video recording.

This monitoring phase allows the epilepsy specialists to gather information, not only to identify the type of seizures, but all other changes in brain activity that are necessary to decide what is the most appropriate treatment plan for you or your family member.

What to expect during your stay at the EMU?

Before admission

- Wash your hair with shampoo and do not use any other products. Dry and leave long hair down the day of admission.
- Pack comfortable and loose clothes including button down shirts and sweatpants. No T-shirts.
- Bring favorite electronic devices with chargers, books, or board games to keep you entertained.
- Do not make changes to your medications before admission unless your doctor tells you to do so. Bring all the medications you are currently taking.

During admission

- A family member, partner, close friend, or a nurse can stay with you during your stay at the EMU.
- You will have electrode cables placed on your head that will be connected to devices in the room
 for the continuous recordings of your brain activity. These cables will be long enough for you to
 move around the room and to go to the bathroom.
- An intravenous (IV) line will be placed on one of your veins to administer medications.
- Seizures may be induced by changing the dose or stopping the anti-seizure medications you are regularly taking. For safety reasons the clinicians will be able to control those seizures.
- The room will be equipped with video cameras and microphones tracking your brain activity. The video-EEG will be monitored 24/7 by trained staff.
- You may be asked to stay awake, to breathe deeply, to do some exercises, or be exposed to flashing lights to induce seizures. All these activities will be carefully monitored and recorded.
- The length of stay in the EMU varies depending on the type and frequency of your seizures.

After admission

- Because every person with epilepsy is different, the process to decide about the appropriate therapy will depend on individual situations, the results from the tests and the evaluation at the EMU.
- Once the team of specialists has a final decision about the treatment, they will share with you and your family the care plan and next steps.

Your epileptologist or the institution will provide you with a list of recommendations and instructions to follow before and during your stay in the EMU.

Frequently Asked Questions About the Epilepsy Monitoring Unit

Q. Why do I have to be hospitalized at the EMU?

A. Seizures are difficult to diagnose and it is important to confirm if the person has epilepsy or another non-epileptic condition. If the person has been diagnosed with epilepsy and doesn't respond to medications, the evaluation at the EMU will help the epilepsy specialists identify what other treatment options are the most appropriate.

Q. Should I continue taking the epilepsy medications during the EMU stay?

R. In general, people will continue with their medications, but the team of specialists may stop or change the dose to induce seizures and observe the brain activity.

Q. What happens if I have multiple seizures during the monitoring phase?

A. Seizures may be induced and for safety reasons you will be closely monitored by the epilepsy specialists. They will be able to give you medications to control those seizures using the IV line.

Q. Am I going to be recorded in the bathroom?

A. No, you won't be recorded when you go or use the bathroom, but you must have a family member or a nurse with you.

Q. How many days should I stay in the EMU?

R. It can vary from a few days to weeks, but the length of stay in the EMU varies depending on the type and frequency of your seizures.

Q. How long will it take to get the results?

R. The team of epilepsy specialists will meet to review and discuss the results from the evaluation and multiple tests. This may take a few days.

Q. Who are the members of the team at the EMU?

A. The multidisciplinary team of professionals includes epileptologists, general brain doctors or neurologists, brain surgeons or neurosurgeons, epilepsy fellows, neurology residents, psychologists, radiologists, nurses, technicians, social workers, and other personnel with experience in epilepsy.

