

KHATAM EPILEPSY CENTER

Khatam Epilepsy center, established in 2005, is a national pacesetter in the evaluation and treatment of epilepsy in both children and adults.

A team of dedicated physicians, healthcare professionals and supporting staff participate in the evaluation and treatment of our epilepsy patients who come here from all over the country and the neighboring countries. More than 200 epilepsy surgical procedures were performed at Khatam hospital during the past years.

Khatam hospital has three epilepsy Monitoring Units which are unique areas designed for patient monitoring.

In the monitoring units, our team employs both EEG (electroencephalography) equipment to monitor brain activities and simultaneous video cameras to record body movements during a seizure. This approach gives us a much greater understanding of seizures than would using either technique alone. The monitoring allows us not only to diagnose a seizure problem accurately, but also to design the best possible treatment plan.

Patients are monitored in the unit throughout the day and night. The length of time people spend in the

unit varies but usually ranges from three to seven days. Although this leaves little private time, it is the most effective way to study seizure and record information that will help us treat our patients.

All of our monitoring units in Khatam are overseen by our Central Monitoring Unit (CMU). The CMU serves as a live control center, with the staffs who remotely monitoring patients all day long and without weekend holidays, via TV monitoring to enhance the care and safety of our patients. Highly trained CMU staffs provide timely feedback to the doctors and caretakers in the epilepsy monitoring units.

The admission process begins by the physician's order of prolonged video-EEG monitoring. The patients will be enrolled in a particular waiting list of admission. As we anticipate discharges, we notify patients by the waiting list in advance.

EPILEPSY MONITORING UNIT STAFF

Patients are being cared by the staff during their stay in the monitoring unit. Feel free to ask questions of any of us.

Epileptologists: Board- certified neurologists with subspecialty training in epilepsy are in charge of medical care. They will order medications and interpret the results of the video-EEG recordings.

Nurses: Our nursing staff consists of registered nurses, licensed practical nurses, and patient care nursing assistants specializing in epilepsy care. They have primary responsibility for the daily care of patients and for managing the units. They can answer questions not only about epilepsy in general, but also about the daily needs of the patients.

EEG technicians: Our EEG technicians are responsible for obtaining accurate recordings and videos. The EEG technicians can answer technical questions about your recordings or redirect your questions to the proper person.

WHEN YOU ARRIVE FOR MONITORING

When you arrive to the Khatam hospital Epilepsy Monitoring Unit, one of the staff members takes you to the area and a nurse will conduct an admission interview with you. The nurse who is a specialist in epilepsy care will ask about your past and present medical histories, as well as your daily routines and lifestyle.

An EEG technician will explain the recording procedures to you and connects multiple electrodes to your head skin which are used to monitor brain waves and activities. The electrodes will stay in place during your entire stay in the unit. Once the electrodes are in place, they are connected to recording amplifiers, and the digital video camera is adjusted. All of these devices are connected to a computer that helps us to collect, analyze, save and recall large amounts of data about each of the patients.

You will spend several days while monitored. EEG technicians and nursing staff utilize the monitoring units to observe patients. Since they can see and hear you, they are always available to respond seizures whenever they occur.

To provoke a seizure and the subsequent recording while admitted in the monitoring unit, it is often necessary to decrease or cease the amount of anticonvulsant medication(s) which are taken by the patients. When medications are reduced, you may experience different types of seizure, some of which your family may not have witnessed before. However, our experts will be able to care of you.

However the patients stay in bed or on a reclining chair next to their bed at most of the times, there are two times of disconnecting from the equipment to get up and move in a day. During these periods of time one of the staffs accompanies the patient wherever it is required. That is a very important point of safety since the anticonvulsant medications has been reduced or discontinued. By the way, walking within the unit is partially restricted.

Rooms

All monitoring rooms are private, equipped with phone, television and refrigerator. Meals are provided

however, you are welcome to order or bring the snacks and drinks of your choice.

WHEN MONITORING IS COMPLETE

When the monitoring is complete, the doctor and EMU team will review the results and determine if any other tests are necessary. If they decide that you may need a surgical operation, the case will be presented at the Epilepsy Center's Patients Management Conference which is held weekly where a multidisciplinary group-including epileptologists, neurosurgeons, neuropsychologists, neuroradiologists, nuclear medicine physicians, a bioethicist, social workers and nurses review and discuss all the collected data. If it clearly shows a definite, localized seizure spot which can be removed without significant risk of brain functional damages such as movement, sensation, vision, speech or memory, they will make the decision for a surgical operation.

The doctor will inform the patient and his/her family about the results of the assessment, explaining whether any further tests are needed and implies the different types of medical and surgical treatments. The nursing

staff will also help the patients to ensure that they are fully informed about the situation, procedures and treatment programs, not to have any confusion, doubt or question about the various aspects of diagnose and treatment of the disease. Since a lot of patients receive multiple medications to control their seizures, it is needed to stay a few more days after the monitoring, to adjust the type and amount of medications.

APPOINTMENT

We recommend you to pay a visit to the neurologists and epileptologists at Khatam hospital. To make an appointment with Khatam Epilepsy center specialists, please call +98 (21) 83554533 - +98 (21) 83554351 from 8:00 to 18:00.

SURGERY

Most of the patients with seizure do not require surgery. But the ones who do not respond to medical therapy or suffered from intolerable side effects of medications should be evaluated for possible surgical

treatment. Seizure-free rates after surgery are about 80 percent.

The principles of epilepsy surgery evaluation in infants, children, adolescents and adults are similar in many aspects. However in children, limited cooperation and brain developmental changes (which can complicate interpretation of EEGs and MRIs) pose additional challenges. On the other hand, children respond the best to the epilepsy surgeries and their still-developing brains can better cope with the surgical removal of the epileptic region.

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