

# Video EEG monitoring

Video EEG monitoring (also called Long Term Monitoring, LTM): continuously records the brain's electrical activity with an EEG while simultaneously recording a movie of the patient with a video camera. The testing may last hours to days. This procedure can be done at home, but is more commonly done in the hospital. The goal of video EEG monitoring is to record the clinical and electrical expression of a seizure. It is the gold-standard for diagnosing seizures. Video EEG is recommended when 1) spells are frequent, 2) it is not clear the events are seizures, 3) the seizure type/s are uncertain 4) seizures are refractory (seizures that are difficult to treat), 5) seizure frequency is uncertain, especially when seizures are subtle, 6) to record the density of seizure discharges in sleep, and 7) there has been a change in mental status.

## **Preparing for inpatient Video EEG monitoring at Boston Medical Center**

Preparing for Video EEG Monitoring (also called Long Term Monitoring, LTM): Long Term Monitoring usually involves an admission to the hospital for 1-5 days to record on video camera and EEG some of the seizure spells a child is having.

It is crucial that an adult who has seen the spells or seizures stay with your child. Usually, children come with a parent or guardian. The parent or guardian must stay with their child continuously during the study, as they will need to push a button on the computer every time a seizure spell is witnessed or suspected. Also the parent will be asked to keep a log of seizure activity. Parents will need to write down the symptoms of the seizure and the time that the seizure began and stopped.

A foldout sleep chair and meals are provided for one parent/guardian. You may find the sleep chair more comfortable if you bring along a sleeping bag or something with a little padding. It may be helpful to make a plan with another adult who knows the child well to take turns staying overnight.

The EEG wires are glued on the child's head and then wrapped in gauze to help keep them in place. The EEG technicians refresh the electrodes' glue every 24 hours. (relates to picture below)

It is important for your child to stay in view of the camera. For older children we try to limit activities to the bed. It is important that parents, nurses, and doctors do not stand in the way of the camera. Your child will have bathroom access and privacy.

We recommend bringing books, video games, movies, homework, and games, that will help pass the time and entertain your child. You may also bring a pillow or blanket to make your child more comfortable. The child life therapist will meet with you and your child on admission to provide activities for diversion.



Your child should wear clothing or pajamas that are comfortable. A top that buttons down the front is recommended, as it will be difficult to take clothing over the head once the EEG is connected.

There may be some residual glue left in the hair after the study is completed. It is best removed by first applying baby oil or hair conditioner to the clumps and scalp for 15 minutes prior to shampoo. Then shampoo, recondition, and gently comb out using wide tooth comb.

Please bring all your child's medicines with you. Also it is helpful to bring a list of past seizure medicines and doses your child may have been on with the reason why it was stopped.