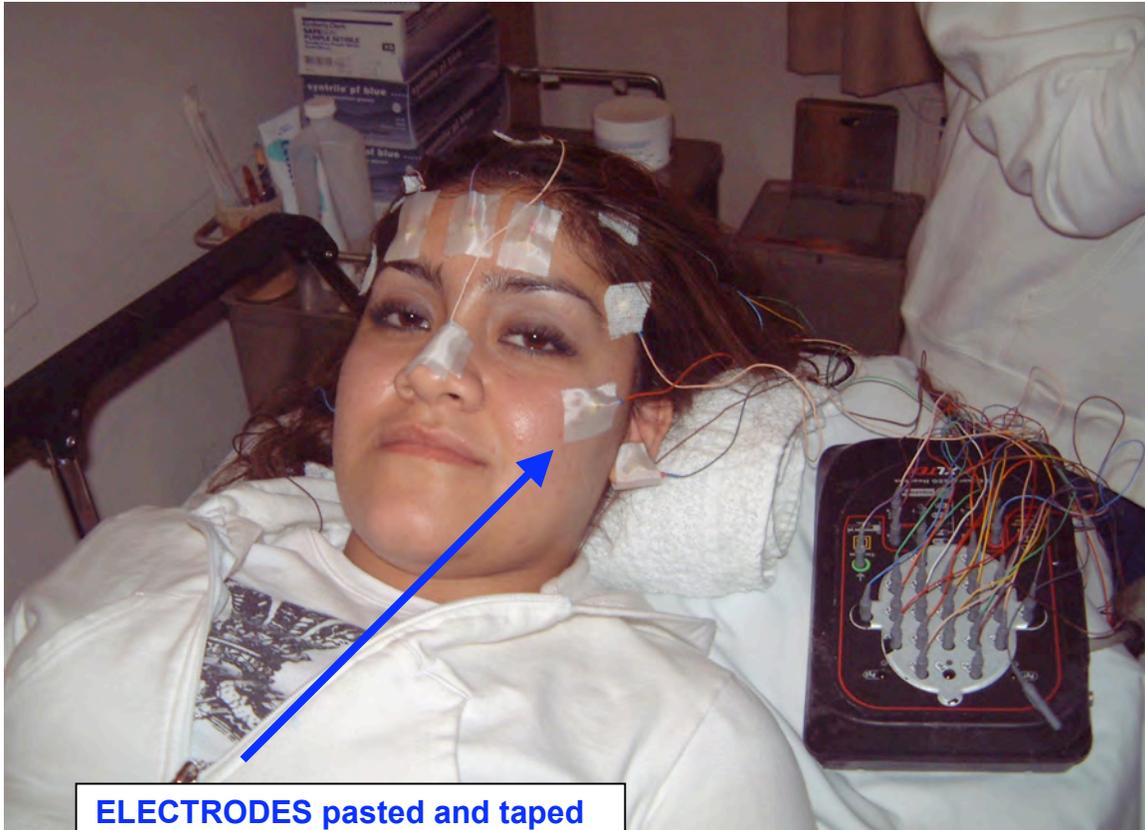


# EEG Monitoring

EEG stands for electroencephalogram. An EEG is able to record information about the brain's electrical activity. Electrodes are pasted to the scalp. The electrodes have wires that attach to a special computer that detects electrical activity coming from brain.



The only way a doctor knows for certain that a child has seizures is to see seizure discharges with an EEG at the exact moment that the child is experiencing clinical signs or symptoms of seizure. Children may have abnormal EEGs, but not have seizures. Children may also have seizures without an abnormal EEG

EEGs may be recorded in an outpatient laboratory, at home, or in the hospital. Your doctor will determine the best setting for your child.

Routine Outpatient EEG: A routine EEG is a brief study lasting 30 minutes to a few hours. The routine EEG rarely captures seizures. It may provide clues about the types of seizures your child has experienced or possible seizure syndrome.

### **Preparing For Your Child's EEG In The Outpatient Laboratory:**



*Mary Russo, Supervisor of Neurophysiology at Boston Medical Center, "Parents should bring along things from home that are comforting to their child. Consider bringing a pillow, a favorite blanket, or a stuffed animal."*

Often, children are sleep deprived for the EEG as sleep deprivation may bring out abnormal electrical activity. Check with your physician about how many hours your child should sleep the night before. As a guideline:

Children less than 2 years of age: wake up 2 hours earlier than usual in the morning and then do not allow a nap the day of the EEG.

Children 2-6 years of age: keep the child up 2 hours later than usual and awaken at 6 am. Do not allow napping before the EEG.

Children 6 years or older: keep the child up until 11-12 pm the night before. Awaken at 5-6 am the morning of the EEG

If you need to drive to the medical center for the EEG, it is helpful to take along another adult to help keep your child awake and prevent napping in the car.

If your child usually has a love object for sleep, such as a blanket or stuffed animal, please take it along for the study.

Infants may be soothed by nursing or bottle feeding. If you give your baby a bottle, please bring one along.

If you shampoo your child's hair before the study, use only shampoo without conditioner, oil, creams, or gels. Hair should be left loose, no beads or braids.

On the day of the test, your child may eat normally but avoid food or drinks with caffeine such as hot chocolate, tea, coffee. If your child drinks from a bottle, please bring one with you.

If your child takes a stimulant (medication used for attention deficit disorder such as methylphenidate or dexedrine), ask your physician if it should not be given on the day of the EEG. All other medications should be given as prescribed.

Do not take other young children with you to the EEG lab. It is important that the lab be a quiet place to promote sleeping.

Once at the EEG lab, your child will need to lie down on a stretcher. The EEG technician will paste little metal discs called electrodes to his/her head. This does not hurt, but sometimes the children do not like holding still. The lights will be turned low to help promote sleep.

During the EEG, a few techniques are used to help see abnormal electrical activity easier. Bright lights may be flashed on and off for a few seconds. Older children will be asked to breathe deeply for a few minutes.

Once the EEG is complete, the technician will remove the electrodes and paste. Shampoo and conditioner will take out any left over paste.