Tests and Treatments

Electroencephalography (EEG) and Video Electroencephalography (VEEG)

What Is an EEG or Video EEG?

An EEG is a safe, painless diagnostic test that uses electrodes to record brain waves (the brain’s electrical activity that tells the body what to do).

A video EEG (VEEG) is a similar test. However, it includes a video recording that shows how the body moves during specific brain activity.

Who Benefits From an EEG or VEEG?

An EEG test for children might be used to diagnose or rule out medical conditions such as disorders of the brain, especially epilepsy and seizures and sleep disorders.

Your child might need an EEG if they experience symptoms such as:

- Confusion.
- Changes in behavior.
- Long-term difficulties with thinking or memory.
- Weakness in parts of the body.

Sometimes kids who have been experiencing seizures will still have normal EEG test results. In that case, specialists might use VEEG monitoring to track and analyze brain waves for a longer period of time.

Preparing for Your Visit

We perform some EEGs while your child is sleep-deprived. If we determine this type of test is important in your child’s case, we’ll provide special instructions about waking up early or changing your child’s sleep schedule.
Before your child’s EEG or VEEG, we recommend taking the following EEG preparation steps.

- Have your child wash their hair the night before the test, but use shampoo only. Conditioners, styling creams, oils, gels or sprays make it difficult for the electrodes to stick to the scalp.
- Make sure your child avoids any caffeinated beverages or sugar (soda, candy, chocolate or cookies) for at least 12 hours before the procedure. Caffeine can affect test results.
- Unless the doctor says otherwise, your child can take their usual medication.
- Your child should not take sleeping medicines for at least 24 hours before the procedure.
- To help the technicians properly place the electrodes, we ask that your child wear a shirt that zips or buttons up the front or back when they arrive for a VEEG. This will allow them to change into pajamas after the electrodes are in place.
- Feel free to bring items to help calm and relax your child, such as pacifiers, toys and blankets. Also bring pajamas that zip or button up the front or back.

**What to Expect During an EEG or VEEG**

Before an EEG begins, we’ll ask your child to lie down on a bed or sit in a chair. An EEG technologist will make small marks on their scalp with a soft pencil. The marks show the technologist where to place the electrodes.

Next, using a cotton swab, we’ll gently rub the marks with lotion. We then use mild glue or paste to attach the small disc electrodes to the scalp. The EEG technologist connects the electrodes to the EEG machine and begins the test.

**Step 1.** The EEG technologist makes small marks on Mateo’s scalp with a soft pencil so she knows where to place the electrodes.

**Step 2.** Using a cotton swab, the technologist gently rubs the marks on Mateo’s scalp with lotion.

**Step 3.** The EEG technologist uses mild glue or paste to attach the small disc electrodes to Mateo’s scalp. She then connects the electrodes to the EEG machine and begins the test.

During the test:

- We will ask your child to remain as still as possible.
- We might ask your child to breathe fast or blow a pinwheel.
- We might ask your child to look at a flashing light.

A VEEG can take anywhere from two to a few days to complete. If your child requires a longer VEEG, we might have them stay at Gillette overnight or for a few days with you or another family member.

See [Preparing for Your Visit](#) for more information.

**Integrated Care**
You can trust the experience of our technicians, who specialize in a variety of neurodiagnostic tests, including EEGs and VEEGs. Our practitioner assistants are familiar with the nerve, muscle and bone conditions that affect children, teens and adults.

Through every part of your child’s journey, we offer support and services to help make the process as comfortable as possible. Our child-friendly atmosphere and Child Life specialists are available to offer positive distractions, such as games and toys, when needed.

Make An Appointment 651-290-8707

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at 651-229-3890.