



Surgery for Grid or Strip Placement

There are a lot of tests that your child's healthcare team will need to do to make sure that epilepsy surgery is the right choice for your child. Grid or strip placement is a test that involves surgery to help us to pinpoint where your child's seizures are coming from.

What will happen during surgery?

Electrodes (el-ECK-trodes) are placed directly on the surface of your child's brain over the area that is thought to be the source of seizures. Electrodes are small sensors that record brain activity. Groups of electrodes make up a grid or strips. We use these electrodes to find a smaller, more exact location in the brain where seizures are coming from.

After surgery, your child will spend the first few nights in the PICU (Pediatric Intensive Care Unit) to make sure there are no complications from surgery.

What will happen during monitoring?

We will monitor your child using EEG, a test that records brain function. We will also take a video to see how their body looks during a seizure. The EEG technologist ("tech") will explain to you and your child how the EEG and video camera work.

When it is safe, your child will be transferred from the PICU to a different area of the hospital, called the Epilepsy Monitoring Unit (EMU). It is where we will do additional tests to check your child's brain activity.

Depending on where your child's seizures are coming from, we may do other tests such as motor and language mapping using the electrodes. We do these tests to find where movement and language control is located in your child's brain.

What can I expect while my child is in the hospital?

For the surgery and tests, your child will stay in the hospital for 7 or more nights. How long they need to stay depends on how often they have seizures.

A parent or caregiver is **required** to stay and sleep in your child's room for the entire time that your child is in the PICU and in the EMU. You are the expert on your child's seizures, and you can help us identify and track your child's seizures. Your child's nurse will also tell you about how you can help with this important part of the test.

Your child will have a certified nursing assistant, or a CNA, as a one-on-one sitter to help keep your child safe and make sure they do not touch their head. The sitter can also help with your child's basic care needs.

To Learn More

- EEG Scheduling
206-987-2081
- Neurology
206-987-2078
- Your child's
healthcare provider
- www.seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your child's nurse.
- From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.

During their hospital stay, your child will need to stay in bed the whole time that the grid or strips are in place. This means that your child will need to do all of their daily tasks, like going to the bathroom, bathing and eating, while in bed. The CNA will be able to help with these tasks.

How do I prepare my child for the test?

- Talk with your child about what to expect.
- Follow instructions from the neurosurgery team for before surgery, such as bathing and when your child should stop eating and drinking.
- Plan to arrive at the hospital the morning of the grid or strip placement. During your child's pre-surgical appointment, please ask your child's Neurosurgery nurse practitioner what time you should arrive.
- If your child needs any special equipment (like a wheelchair), please bring it from home.

What else do I need to know?

- While you are here, a team of pediatric neurosurgeons, neurologists, nurses, EEG technologists, physician assistants and nurse practitioners will care for your child. They will make daily rounds to make sure that your child's hospital stay is going well and to talk to you about any questions or concerns you have.
- Planning ahead will help you and your child during your stay. Read our handout "Epilepsy Monitoring Unit Family and Visitor Guidelines" and visit seattlechildrens.org/patients-families/hospital-stay/.