

Rasmussen Encephalitis

What Is Rasmussen Encephalitis?

Rasmussen encephalitis is a progressive disorder characterized by focal intractable epilepsy, hemiparesis, and progressive atrophy of one side of the brain.

Children with the condition will have:

- Focal seizures, affecting one side of the body
- Variable degrees of weakness (only one side of the body, affecting arm and leg)
- MRI showing unilateral brain atrophy (affecting only one side of the brain)

Rasmussen encephalitis begins in childhood (only 10% of the patients have seizures starting during adolescence or adulthood), and the course of the disease is progressive (seizures and weakness get worse with time, as the brain atrophy increases). It is common to see very frequent (almost continuous) focal seizures affecting the face, arm or leg (*epilepsia partialis continua*).

What Kinds of Seizures Happen in Rasmussen Encephalitis?

Focal seizures:

In this type of seizure, a child:

- Has rhythmic jerks (clonic movements) in one part of the body
- This type of seizure can evolve to a convulsion (bilateral tonic-clonic seizure)

What Causes Rasmussen Encephalitis?

There is increasing evidence that it may be caused by an imbalance in the immune system, which would increase brain inflammation. However, the exact cause of Rasmussen encephalitis has not been established yet.

How Is Rasmussen Encephalitis Diagnosed?

A pediatric neurologist (a doctor who treats brain, spine, and nervous system problems) can diagnose the condition by doing tests such as:

- EEG
- VEEG, or video electroencephalography (EEG with video recording)
- MRI

How Is Rasmussen Encephalitis Treated?

Seizures in Rasmussen encephalitis is treated with antiseizure medications, but with disease progression epilepsy surgery may be considered.

How Can Parents Help?

Caring for a child with Rasmussen encephalitis can be challenging. Work with your child's care team to set up needed medical visits and therapies. Work with them to create a treatment plan that provides your child with a good quality of life.

Make sure that you and other adults and caregivers (family members, babysitters, teachers, coaches, etc.) know what to do during a seizure. Because it could lead to a bilateral tonic-clonic seizure, your doctor may prescribe an emergency medicine to give if your child has a long seizure or many seizures in a short amount of time. Be sure to ask your doctor about a seizure rescue plan for your child.

What Else Should I Know?

If your child has epilepsy, reassure them that they're not alone. Your doctor and the care team can answer questions and offer support. They also might be able to recommend a local support group. Online organizations can help too, such as:

- [Epilepsy Foundation](#)

- [CDC – Managing Epilepsy](#)