Benign Rolandic Epilepsy

What is Benign Rolandic Epilepsy (BRE)?

Benign Rolandic Epilepsy is a common, mild form of childhood epilepsy characterized by brief simple partial seizures involving the face and mouth, usually occuring at night or during the early morning hours. Seizures are the result of brief disruptions in the brain's normal neuronal activity.

Who gets this form of epilepsy?

Children between the ages of three and 13 years, who have no neurological or intellectual deficit. The peak age of onset is from 9-10 years of age. BRE is more common in boys than girls.

What kind of seizures occur?

Typically, the child experiences a sensation then a twitching at the corner of their mouth. The jerking spreads to involve the tongue, cheeks and face on one side, resulting in speech arrest, problems with pronunciation and drooling. Or one side of the child's face may feel paralyzed. Consciousness is retained. On occasion, the seizure may spread and cause the arms and legs on that side to stiffen and or jerk, or it may become a generalized tonic-clonic seizure that involves the whole body and a loss of consciousness.

When do the seizures occur?

Seizures tend to happen when the child is waking up or during certain stages of sleep. Seizures may be infrequent, or can happen many times a day.

How is Benign Rolandic Epilepsy diagnosed?

A child having such seizures is given an EEG test to confirm the diagnosis, a test that graphs the pattern of electrical activity in the brain. BRE has a typical EEG spike pattern—repetitive spike activity firing predominantly from the mid-temporal or parietal areas of the brain near the rolandic (motor) strip.

Why is it called "Benign Rolandic Epilepsy"?

Benign Rolandic Epilepsy is considered "benign" because it is usually outgrown at adolescence, whether it is treated or not. Furthermore, children who have it are not adversely affected— other than the seizures, their health remains the same. The word "Rolandic" refers to the part of the brain—the motor or rolandic strip—that is the focus of the epileptic activity in these children.

Why does a child develop Benign Rolandic Epilepsy?

There may be a genetic predisposition to this form of epilepsy, but we don't know why some children develop seizures and others do not. It is considered "idiopathic," meaning there is no apparent underlying cause, no structural lesions in the brain. Apparently, children with BRE have a lower than normal seizure threshold – meaning they are more likely to have a seizure – but this changes as their brain develops.

What is its treatment?

BRE may be left untreated. If a child's seizures are frequent or troublesome, or if there is a concern about nocturnal seizures, anti-epileptic medication may be prescribed. Carbamazepine is the drug of choice, followed by valproic acid. Under a doctor's supervision, medication can be tapered off and discontinued once the child reaches puberty, or after a seizure-free period of approximately three years.

Does Benign Rolandic Epilepsy go away?

BRE is considered to have an excellent prognosis. Whether treated or not, the seizures and the EEG spikes usually disappear at puberty, by which time the brain and central nervous system have matured. The child's intellect and overall functioning remain normal.