

Benign Rolandic Epilepsy (BRE)

Benign Rolandic Epilepsy is an epilepsy syndrome. It is called “Benign” because it has a good outcome - nearly all children will “outgrow” this syndrome around puberty - and “Rolandic” because that is the area of the brain where the seizures occur syndrome. It is classified as a partial seizure syndrome because the seizures occur in a part of the brain. However, the seizures can spread to involve the whole brain (generalized seizure).

Benign Rolandic Epilepsy is one of the most common types of epilepsy in children. It affects almost one quarter of all the children who have epilepsy. It affects boys and girls equally. It usually starts between the ages of 3 and 12 years, and often stops around puberty (aged 14-16 years). Children who have this type of epilepsy are usually healthy without other neurologic problems although some may have specific difficulties with reading and language.

Symptoms: Seizures often start in sleep during the night (or daytime naps). The classic BRE-seizure is described as the child awakening from sleep aware but unable to speak with a tingling feeling over one side of the mouth (tongue, lips, gums, inner cheek and or the throat), and often has facial twitching on the same side. Twitching may spread to the arm and/or the leg, usually on the same side as the movements in the face. The child usually finds a parent who will see part of the seizure which usually lasts a few minutes.

Sometimes the child may either start with or have the above seizure develop into a convulsion (with loss of consciousness and whole body stiffening and or shaking) which usually only lasts 1-3 minutes. .

Diagnosis: is made from the history of the seizures, neurologic examination and EEG findings.

Treatment: Treatment with anti-epileptic drugs is not always considered necessary since it is known that the seizures will tend to disappear as the child becomes an adolescent. In addition, many children will only have one or two seizures and, therefore, treatment will not be needed. However, most parents prefer treatment. Many seizure medications are effective in controlling BRE. Your doctor can discuss the treatment options and help choose the best treatment for your child.

If treatment is preferred, then the decision on which AED (anti-epileptic drug) to choose is based on many issues specific for you and your child including effectiveness, safety, side effect profile, adverse reaction potential, form (liquid, chewable, tablet, capsule), frequency taken (once, twice, three times a day), cost, generic availability and so on. I typically suggest the safest AEDs first which includes:

- Gabapentin (Neurontin®)
- Levetiracetam (Keppra®)
- Oxcarbazepine (Trileptal®)

Prognosis: The prognosis is excellent as the definition of this disorder, “Benign” indicates that all children will “out-grow” their seizures. However, it may be years before seizures resolve, during which she/he may have many seizures. If the seizures are not due to BRE but represent a different disorder such as complex partial epilepsy, she/he may not “out-grow” the seizures and may need long-term treatment. EEGs, brain imaging, treatment response and monitoring by the neurologist will help determine the diagnosis. Children who have benign rolandic epilepsy do not usually have learning difficulties. Some may have some problems with reading, but most cope well with school work.

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