BC Epilepsy Society

Childhood Epilepsy with Centrotemporal Spikes (CECTS)

What is Childhood Epilepsy with Centrotemporal Spikes (CECTS)?

This was previously known as Benign Rolandic Epilepsy of Childhood (BREC) or Benign Childhood Epilepsy with Centrotemporal Spikes (BCECT) and is one of the most common epilepsy syndromes in childhood. It is a self-limited epilepsy with onset of seizures from ages 2 to 13 years (mostly ages 5 to 10 years) and with seizures resolving in virtually all children by their mid-teens. Children typically have normal development and there may be a family history of Childhood Epilepsy with Centrotemporal Spikes in a first degree relative.

Seizures typically occur in the night and may start with parasthesias ("pins and needles" feeling) in the tongue, lips, cheeks, or face. There may be drooling, guttural noises, inability to speak, and involuntary movements of the tongue and face. Children usually remain aware unless the seizure progresses to involve the arm and leg or may become a secondarily generalized tonic clonic seizure (bilateral convulsive movements). Seizures are, for the most part, brief and last less than a few minutes. Paralysis and numbness of the affected side, with difficulty speaking, may occur after the seizure is over and the child may return to sleep.

Most children with CECTS will have seizures only in sleep and up to 20% of children will only have a single seizure. A small proportion of children may have seizures during the day or frequent seizures.

How is a diagnosis of CECTS made?

After taking a detailed history and performing a physical examination, the physician will usually have a high suspicion of CECTS and will order an electroencephalogram (EEG). The EEG will show characteristic findings that are much more obvious in sleep. Neuroimaging (an MRI or CT scan) is not necessary unless there is doubt about the diagnosis.

What is the treatment for Childhood Epilepsy with Centrotemporal Spikes?

All children and families should follow seizure precautions (please see our First Aid poster or handouts from your doctor or nurse). Since most children have only a few brief seizures or only have brief seizures during sleep, your doctor may not recommend treatment with an anticonvulsant medication. Anticonvulsant therapy may be started if the seizures are frequent, are distressing to the child or family, or occur during the day. Each family is different and the decision to start an anticonvulsant medication should be made after a discussion between the family and the treating doctor.

Will my child outgrow their seizures?

Virtually all children with CECTS will outgrow their tendency for seizures by adolescence. The EEG will also become normal but the child may have outgrown the tendency to seizures before it occurs.

If this is an inherited condition, are my other children at risk for epilepsy?

Studies have shown that up to 15% of siblings of children with CECTS have similar seizures and that up to 20% of the siblings may have an abnormal EEG. Children who do not have seizures may have an abnormal EEG and ordering an EEG on siblings without seizures is not recommended.

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You can join the BC Epilepsy Society as a member and receive all program and service benefits
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