Childhood Epilepsy With Centrotemporal Spikes (also known as Benign Rolandoic epilepsy, Rolandoic seizures, BECT, Sylvian Fissure Epilepsy)

What is benign partial epilepsy with centrotemporal spikes?

Benign childhood epilepsy with centrotemporal spikes is the most common epilepsy syndrome in childhood. Children with rolandic epilepsy have a characteristic clinical presentation. Onset is usually in mid to late childhood with the peak age from 7-9 years.

The seizures have a focal onset usually beginning in the face, mouth and tongue. The child usually has awareness of some or all of the seizure. Seizures can generalise to tonic clonic seizures; in some cases the first seizure is a generalised seizure with the focal phase unwitnessed. The majorities of seizures (70-80%) are nocturnal and occur during sleep.

Many children with this condition are not prescribed medication, mainly because of the low frequency of seizures in most individuals (10-20% children only have one seizure), and eventual remission. If medication is given there is usually a good response. Usually the seizures cease spontaneously by puberty.

How common is it?

10-25% of childhood epilepsies are benign partial epilepsy of childhood with centrotemporal spikes. It occurs with a slightly greater incidence in boys, with onset between 3 and 13 years of age. About 30% of these children will have a family history of epilepsy.

Epilepsy and Benign Partial Epilepsy of Childhood with Centrotemporal Spikes.

- Seizures appear as focal seizures with sensorimotor symptoms involving the mouth, tongue and face, such as twitching and numbness or a tingling sensation.
- Facial seizures consist of a tonic contraction of one side of the face and or clonic jerks of the cheek and eyelids.
- This may be accompanied by gutteral sounds, movements of the mouth.
- Contraction of the jaws, feelings of suffocation, profuse salivation, and a sensation inside or about the mouth.
- Sometimes an arm is involved and this is characterised by clonic jerks.
Tonic clonic seizures may occur especially during sleep.
Seizures characteristically occur on going to sleep or on waking from sleep.
Daytime seizures often occur when the child is inactive or bored for example on a bus journey and the seizures are probably related to periods of dozing off.
Seizures are usually brief in duration.
Frequent seizures tend to occur in clusters separated by long intervals with no seizure activity.
Seizures may be associated with short lived postictal hemiparesis (muscle weakness of one side of the body) or speech disturbance.
Sialorrhea (excessive saliva flow) and anarthria (a loss of control of the muscles that control speech, resulting in the inability to utter words) are common.
A variety of minor disturbances in behaviour, cognition/learning and fine motor control have been reported, particularly during the active part of the condition. These features may require specific treatment and educational approaches for some children.
The seizures generally remit before 16 years of age.

References: