

## Rolandic epilepsy

Benign Rolandic epilepsy or benign childhood epilepsy with centrotemporal spikes (BCECTS) is that the most typical epilepsy

Syndrome in childhood. Most kids will outgrow the syndrome (it starts around the age of 3–13 with a peak around 8–9 years and stops around age 14–18), hence the label benign. The seizures, sometimes mentioned as sylvian seizures, start around the fissure of Rolando of the brain (also called the centrotemporal area, located around the Rolandic fissure, after Luigi Rolando)

### Signs and symptoms

The cardinal features of Rolandic epilepsy are infrequent, often single, focal seizures consisting of

- A. unilateral facial sensorimotor symptoms (30% of patients)
- B. oropharyngolaryngeal manifestations (53% of patients)
- C. speech arrest (40% of patients), and
- D. hypersalivation (30% of patients)

**Hemifacial sensorimotor seizures** are often entirely localised within the lower lip or spread to the ipsilateral hand. Motor manifestations are sudden, continuous or bursts of clonic contractions, usually lasting from a few of seconds to a flash .Ipsilateral tonic deviation of the mouth is additionally common. Hemifacial sensory symptoms contain unilateral numbness mainly within the corner of the mouth. Hemifacial seizures are often associated with an inability to speak and hypersalivation: The left side of my mouth felt numb and commenced jerking and pulling to the left, which i could not speak to say what was happening to me. Negative myoclonus are often observed in some cases, as an interruption of tonic muscular activity

**Oropharyngolaryngeal ictal** manifestations are unilateral sensorimotor symptoms inside the mouth. Numbness, and more commonly paraesthesias (tingling, prickling, freezing), are usually diffuse on one side or, exceptionally, could even be highly localised even to a minimum of one tooth. Motor oropharyngolaryngeal symptoms produce strange sounds, like death rattle, gargling, grunting and guttural sounds, and combinations: In his sleep, he was making guttural noises, along side his mouth pulled to the right , ‘as if he was chewing his tongue’. We heard her making strange noises ‘like roaring’ and located her unresponsive, head raised from the pillow, eyes wide open, rivers of saliva beginning of her mouth, rigid.

**Arrest of speech is a form of anarthria.** The child is unable to utter one intelligible word and attempts to talk with gestures. My mouth opened which I could not speak. I wanted to say I cannot speak. At the same time, it had been as if somebody was strangling me.

**Hypersalivation**, a prominent autonomic manifestation, is typically associated with hemifacial seizures, oro-pharyngo-laryngeal symptoms and speech arrest. Hypersalivation is not just frothing: Suddenly my mouth is crammed with saliva, it runs out kind of a river which i cannot speak.

**Syncope-like epileptic seizures** may occur, probably as a concurrent symptom of Panayiotopoulos syndrome: She lies there, unconscious with no movements, no convulsions, kind of a wax work, no life.

**Consciousness and recollection** are fully retained in additional than half (58%) of Rolandic seizures. I felt that air was forced into my mouth, i could not speak which i could not close my mouth. I could understand well everything said to me. Other times I feel that there is food in my mouth and there is also plenty of salivation. I cannot speak. within the rest (42%), consciousness becomes impaired during the ictal progress and in one third there is no recollection of ictal events.

**Progression to hemiconvulsions** or generalised tonic-clonic seizures occurs in around half children and hemiconvulsions could even be followed by postictal Todd's hemiparesis.

**Duration and circadian distribution:** Rolandic seizures are usually brief, lasting for 1–3 minutes. Three-quarters of seizures occur during nonrapid eye movement sleep, mainly at sleep onset or just before awakening.

**Status epilepticus:** Although rare, focal motor status or hemiconvulsive epilepsy is more likely to occur than secondarily generalised convulsive epilepsy, which is outstanding. Opercular epilepsy usually occurs in children with atypical evolution or could even be induced by carbamazepine or lamotrigine. This state lasts for hours to months and consists of ongoing unilateral or bilateral contractions of the mouth, tongue or eyelids, positive or negative subtle perioral or other myoclonus, dysarthria, speech arrest, difficulties in swallowing, buccofacial apraxia and hypersalivation. These are often associated with continuous spikes and waves on an EEG during nonrapid eye movement sleep .

**Other seizure types:** Despite prominent hypersalivation, focal seizures with primarily autonomic manifestations (autonomic seizures) aren't considered a neighborhood of the core clinical syndrome of Rolandic epilepsy. However, some children may present with independent autonomic seizures or seizures with mixed Rolandic-autonomic manifestations including emesis as in Panayiotopoulos syndrome.

**Atypical forms:** Rolandic epilepsy may present with atypical manifestations such early age at onset, developmental delay or learning difficulties at inclusion, other seizure types, atypical EEG abnormalities.

These children usually have normal intelligence and development. Learning can remain unimpaired while a toddler is afflicted with Rolandic epilepsy.